



Kalevala Sauna

-Exploration of Architectural Expression



TAMPEREEN TEKNILLINEN YLIOPISTO
TAMPERE UNIVERSITY OF TECHNOLOGY

Tampereen Teknillinen Yliopisto - Tampere University of Technology
Arkkitehtuurin laitos - School of Architecture

Haruka Maitani

Kalevala Sauna -Exploration of architectural expression

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For further information about this thesis, contact the author:
Maitani, Haruka
haruka.maitani@gmail.com

Haruka Maitani

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-Exploration of architectural expression

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Abstract

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Exploring potentiality of expression is one of the most vital issues in architectural design. In any occasions, architects seek a proper way to express a meaning of spatiality. The environment, city, history, culture, age and any factors mutually collaborate to identify the place, therefore the answers are innumerable. In addition, by contrast to other art expression, human intervenes in it. One’s action and interpretation simultaneously affect architectural space in both expressive and experiential ways. Due to this complexity, it is consequently interesting yet difficult to express concepts in architectural manners, especially when the idea originates in an abstract subject.

Our primitive senses build a fundamental core of the perceptual world. Based on this notion, this research analyses the interactive relation between architecture and human, followed by design process dealing with mythological theme to examine the architectural expression of indigenous abstraction.

The thesis contains four main chapters; Expression and Experience; Kalevala; Mythology in Expression; and Kalevala Sauna. First chapter refers the theoretical research concerning to architectural meaning of expression. Bodily experience and perceptions are studied from several points of view in comparison with arts. Second and third chapters focus on mythology, oral tradition that transmitted over generations. A Finnish national epic “Kalevala” is analysed as a clue to read a vernacular context, while case study proves various interpretations of myths in any expressive scenes both in Finland and other countries. The last chapter concludes the above research with design process. The themes from the Kalevala are applied as a main concept to a design of sauna, the place of Finnish authenticity, perceived with entire bodily sense. Throughout the thesis, consistent theme is to seek the potentiality of architectural expression and of its perceptual experience.

Tiivistelmä

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Yksi arkkitehtonisen suunnittelun tärkeimpiä kysymyksiä on arkkitehtonisen ilmaisun mahdollisuuksien tutkiminen. Kaikissa tapauksissa arkkitehdit etsivät sopivaa tapaa ilmaista tilallisuuden merkitystä. Ympäristö, kaupunki, historia, aikakausi ja muut tekijät yhdessä vaikuttavat paikan identiteettiin, ja sen tähden erilaisia vastauksia on lukematon määrä. Lisäksi, toisin kuin muussa taiteellisessa ilmaisussa, ihmiset puuttuvat siihen. Yksilön toiminta ja tulkinta vaikuttavat samanaikaisesti arkkitehtoniseen tilaan sekä ekspressiivisesti että kokemuksellisesti. Tämän kompleksisuuden vuoksi on mielenkiintoista mutta myös vaikeaa ilmaista konsepteja arkkitehtonisin keinoin, varsinkin kun idea on peräisin abstraktista aiheesta.

Primitiiviset aistimme muodostavat aistimaailmamme perustavan ytimen. Tämän ajatuksen pohjalta tämä tutkimus analysoi arkkitehtuurin ja ihmisen interaktiivista suhdetta, jota seuraa mytologista teemaa käsittelevä suunnitteluprosessi, jossa tutkitaan alkuperäisen abstraktion arkkitehtonista ilmaisua.

Diplomityö sisältää neljä kappaletta, Ilmaisun ja kokemus, Kalevala; mytologia ilmaisussa, ja Kalevalainen sauna. Ensimmäinen kappale viittaa teoreettiseen tutkimukseen arkkitehtonisen ilmaisun merkityksestä. Kehollista kokemusta ja aistimusta tutkitaan useista näkökulmista taiteeseen verrattuna. Toisessa ja kolmannessa kappaleessa keskitytään mytologiaan, suulliseen kansanperinteeseen joka välittyi sukupolvien yli. Suomalaista kansalliseeposta Kalevalaa analysoidaan vihjeenä jolla tulkitaan vernakulaarista kontekstia, kun taas tapaustutkimukset osoittavat erilaisia tulkintoja myyteistä ja ilmaisullisista kohtauksista sekä Suomessa että muissa maissa. Viimeinen kappale päättää analyysiosion suunnitteluprosessiin. Kalevala-teemoja käytetään pääkonseptina saunan suunnittelussa, joka on suomalaisen autenttisuuden paikka, aistittuna keholla kokonaisvaltaisesti. Diplomityössä johdonmukainen teema on etsiä arkkitehtonisen ilmaisun mahdollisuuksia sekä sen havainnoitavaa kokemusta.

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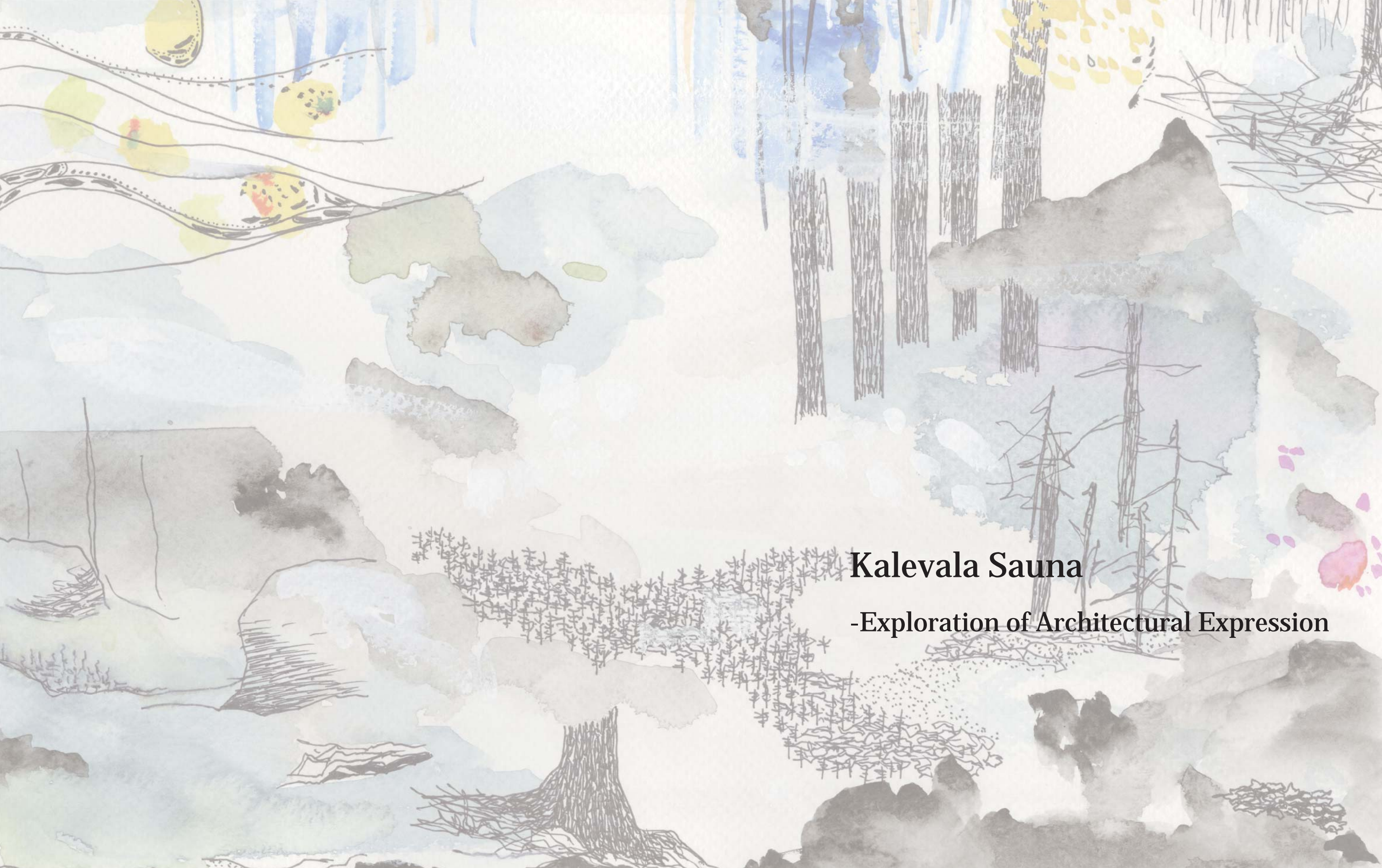
Great thanks to Mr. Antti A. Pesonen and Mrs. Elina Viitaila, who gave me invaluable time to discuss on perceptual space at Villa Kokkonen, opening my new perspective.

I take this opportunity to express my special thanks to all of my friends who shared their time for fruitful experiences with me and have encouraged me always by my side.

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Kalevala Sauna

-Exploration of Architectural Expression



Introduction

Expression, the fundamental key in the life. We express ourselves in words, in face, with behaviour, with fashion, or in any way, with or without consciousness. It is more obvious in art. Painters paint their perspectives, musicians sing lyrical feelings, sculptors shape beauty and dancers dance emotive spirits. Expression is thus the way to show the identity.

It is not exceptional in architecture. Instead of architects' own characters, it projects the site specificity as well as spatial quality and concepts. In contrast to arts, the most significant feature of architectural expression is the human intervention. Architecture fundamentally requires people inside it as a key element for temporary spatial quality. The interactive relation between space and human continuously creates momentary phenomena, whose coexistence ubiquitously build the spatial entirety.

We, human beings, thus play a vital role in architecture. Hence, the thesis starts with the research on **expression and experience**. The primitive significance of architecture is analysed, followed by the study of perceptual experience. It refers to comparisons with art in order to reveal the expressive peculiarity of architecture from various views; experience, perception, phenomenology and body in space. The main focus is generally stays in spatial aspects relevant to experiential expression and in the human primitive sense as a fundamental core of perceptual world.

After the theoretical research, the study moves on to more specific topic, that is the expression of mythology. Architecture always refers to many different factors; spatial context of the site, human action, building materiality, form and structure. This complexity make it profound, interesting, yet difficult, especially when representing an abstract concept which is often concluded with atmospheric design. To study how the atmosphere of abstraction is expressed in architectural manner and how it deepens the spatial experience, **Kalevala** is chosen as a main theme of design practice.

As it is widely know as a national epic of Finland, the Kalevala is deep rooted in this country. Originating in oral tradition had passed over generations, the mythology shows primitive perspective of the world and vital notions of their origin as well as life and culture of ancient Finns. There are some arguments on Finnish authenticity in the Kalevala due to uneven distribution of poetry-collec-

tion area: most of original poems come from Karelia, either Finnish or current Russian. Despite the fact, the thesis deals with this epic as a clue to understand Finnishness with following reasons. Firstly the Kalevala has been widely prevailed as being a national epic for long time, accordingly it has been popular theme for artists seeking Finnishness in it. Another reason is that it is a good motif in a study of expression of national abstraction not only because of its historical value but also because of its publicity that all Finns know. The Kalevala chapter therefore refers the key themes and vernacular notions on speciality related to design phase, as well as its background.

Before moving to actual design process, some references are studied in third chapter, **mythology in expression**. Here first states the perceptual developments occurred during the historical shift from oral words to written literature. It reveals the keynotes in mythic expression, transforming oral words into other shapes. Then actual reference projects are studied both in other countries with the indigenous mythology and the projects related to the Kalevala. The Kalevala case study simultaneously shows the influences in art to see how the myth had been interpreted from various perspectives.

The final aim of the thesis is to examine above theoretical researches in actual design. The last chapter treats the **Kalevala sauna** design process referring the mythology as a main concept. Because of its cultural importance, perceptual spatiality and traditional concept, sauna is chosen to be a proper building for the practice of designing experiential expression and of the Kalevala. Throughout the process, the main focus remains in seeking proper ways to express abstract image of the mythology Kalevala, and to find out the potentiality of expression to provide the experience of atmospheric world. It possibly contains the author's background, grown up in Japan whose indigenous bathing culture constitutes the vital part of the national identity.

Concepts in architectural design are sometimes considered extra, when thinking only about the use. However it profoundly enriches the place, otherwise architecture will be just a structure. When the place is experienced by full bodily senses, the memory of space deeply remains in us. Expression is indeed a thing for that. Throughout the thesis, main focus stays in the relation between architecture and human, that is the most essential issue for profound experience of architecture in the perceptual world.



Chapter 1. **Expression and Experience**

1-1. Architecture for Human



¹ Pallasmaa 2014. "The Architectural Image". P.12.



² Hall 1990. Pp.79-80.



³ Pallasmaa 2014. "The Architectural Image". P.11.

What is the relation between architecture and human? This is a grand question with which most of architects are confronted through their architecture life. This has been pursued by a great deal of architects through ages, therefore answers are numerous. Some says that architecture is the base of human life and culture, some considers it as a human den to be protected from outside enemy, and for some, it is a constitution of the city. There are a variety of views as much as the number of architects and there is no correct nor wrong theory on it. Beginning to analyse the architectural role in its expression, the basic view of the relation between architecture and human should be stated.

In his article, Juhani Pallasmaa said the architectural "*ethical task is to be supportive of life and to enhance our existential experience by providing life with a specific horizon of meaning*"¹, based on the analysis of theory by philosopher Karsten Harries. This view is exemplified in the case of spatial perception of Eskimo. They live in the place where the firmament and the earth are homogeneous. In the space without any clue to know the place, they travel long distance without actual objects nor points. Contour of the land, quality of snow and wind indicate the ways to go.² They live rather in the auditory, tactile and olfactory world than in vision to adopt themselves in infinite homogeneous space and time. It is not impossible to find out our own space and direction in grand nature fully using our senses, however, in such a magnificent criterion, people tend to lost triggers for action.

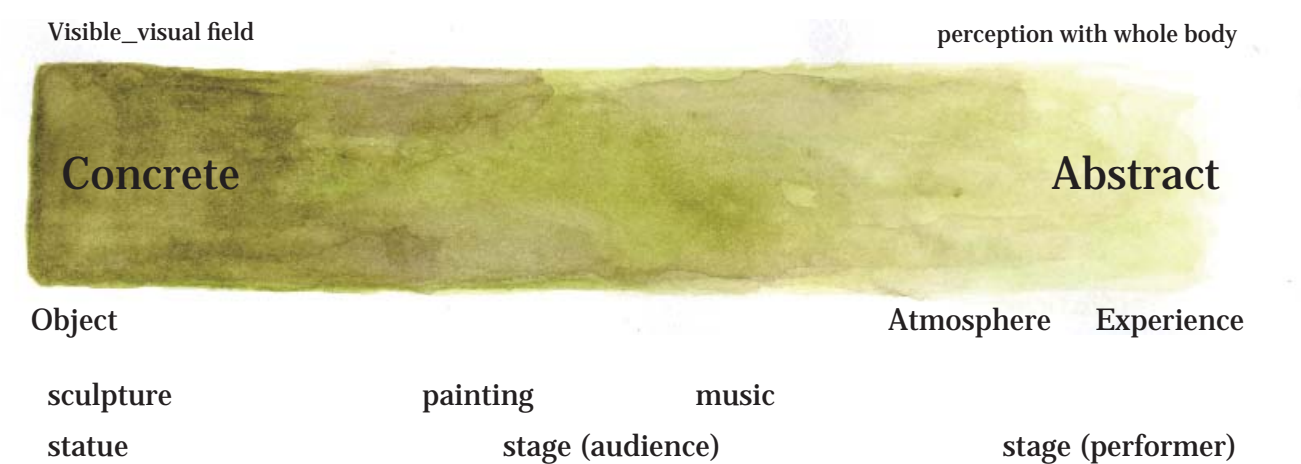
Architecture brings to the wild nature human standard through which people experience the world knowing horizon, distance and relative positions. People wander between amorphous natural space and human space as well as between endless natural time and human time. We started to experience the new world through architecture, which is different from the one without it. People discover the new real and find a specific horizon in human criterion created by architecture.³

Architecture produces the human criterion and horizon into the world. It is not a human scale, but a criterion. Either small cosy space and expansive imposing space is experienced by human. The space over human scale does not always mean over human criterion. The significant is to think how it is experienced or perceived by human. Thus, the relation between architecture and human is, so to speak, the fundamental of architectural design.

Figure 1.1. Architecture for human criteria.

Architecture as expression

1-2. Types of Expression



A word “expression” sums up various kinds. Creative activities are always more or less accompanied by expression, therefore the way of expression is multifarious. Some are concrete and some are abstract.

Concrete expression is mainly representation of objects, exemplified in paintings, sculptures and dramas which shows specific stories, scenes or characters. The will and interpretation by artists comparatively modestly appear, in many cases, in ocular expression. Therefore the viewers easily understand objects and they tend to conceive similar impressions of it. On the other hand, abstract expression comprises more subjective interpretations by artists. The original objects turns into the expression of the atmosphere or the world of them, perceived by artists through their own views or interpretations. The receivers face to the objects in unique and abstract atmosphere created by artists and they are required to interpret the art pieces in their own points of view. Accordingly, it gives different impressions in any extent to each people who perceives the same pieces even at the same time. Moreover, personal mental state and the surrounding environment momentary vary the experience of it.

Needless to say, either more or less includes artists’ interpretations as their expression. In case of paintings of a particular scenery, for example, concrete expression depicts the scenery as it is, modestly projecting the artists’ own views in this precise representation, while abstract expression develops the unique world with entirely different colours or shapes from real, as if they paint naked pictures in their brain. They both express artists’ thoughts. Only difference is the way of production. At times, concreteness and abstractness coexist in one expression in any ways, consequently, art works would not be clearly categorised in one of these two properties.

Architecture contains both concrete and abstract expressions. The building forms directly represent objects and the spatial design tells the abstract atmosphere of it. Besides, those two are intermingled and occasionally interact each other. Some architecture has more concrete expression and less abstract one, and vice versa. In addition, expressions in it are perceived differently according to how they use the space. Some people shortly spend time there, just passing by, some stay longer and some come there in their daily routine. Thus, architectural expression is peculiar, perceived in vary ways according to the relation to the space by each people at each time, results in different experience.

Figure 1.2. Expresions.

Body, space and experience

1-3. Experience



Figure 1.3. Diller + Scofidio and Frédéric Flamand. "Moving target", 1996.

Both architecture and other arts have "receivers", perceiving it through their mind. They first feel the piece of expression, then interpret it through their own view. The way of perception is wholly entrusted to receivers in most cases since it is done by human sensory organs and their mind. Although this perceptive process is basically same in any expression, the ways of experience differ in each, especially in architecture and in arts.

In many cases, at museums, it is not allowed touching art works nor eating and is required to keep quietness. All the senses excepting vision are restrained. Body is excluded from the experience. Only art pieces, eyes and mind exist there

and scarcely get interference by others. Music or dramas which require being perceived by several senses likewise exclude other unnecessary senses. In other words, people meet arts in extremely finite circumstance. Thus, body is left out of consideration in essence while it is desirable to pursue mind with highly emphasis⁴.

⁴ Kawai 2014. Pp.40-41. Summary of conversation between Shusaku Arakawa and Hiromi Fujii.

⁵ Kawai 2014. Pp.40-41. Summary of conversation between Shusaku Arakawa and Hiromi Fujii.

Only what adopts human body and mind into experience is dance and architecture.⁵ People perceives expression with full of senses through whole body movement. One thing should be noted is that dance has theatrical characteristic establishes the relation between subject and object, whose experience of stage is different. Expression from performer as a subject meets with the audience as an object. At the moment, performers reveal their mind through whole of the body and senses. On the other hand, audiences perceive it mainly only with their eyes and ears and other sensory organs are left out of experience. Only performers can adopt their full body into expression while the audience stays only receivers like the ones of art pieces in museum.

In contrast to dance expressed with body and experienced with few senses, architecture is expressed with space and experienced with full of body. In architecture, not body but matter is applied in expression. The receivers feel space with body and senses. Consequently, symbiosis of body and mind occurs in objective experience, not in expression.

It is formerly considered that what to be received from an art work rigidly exists inside it.⁶ However experience of some expressive works, especially of architecture, is conceivable to be experience of receivers themselves, not what comes from inside of subject. Empirical space is created by receiver's mental and physical condition of the moment, therefore, it is perceived in different ways by each people at each time. Since architecture contains space of daily use, it constantly changes to bring variation of experience and interaction of space and body.

Essential experience of architecture space is not noun but verb.⁷ It exists in the body movement. To experience architecture is to release our body into space, to feel it with senses and to perceive it with mind. Although it differs from any other artistic expressions, this is fundamental and vital point in architectural expression and design.

⁶ Kawai 2014. P.18.

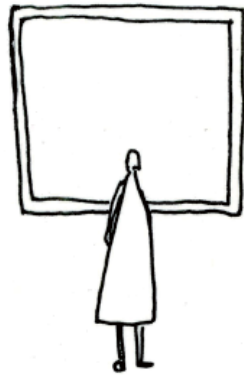
⁷ Pallasmaa 2005. P.63.

Body, space and experience

1-4. Perception

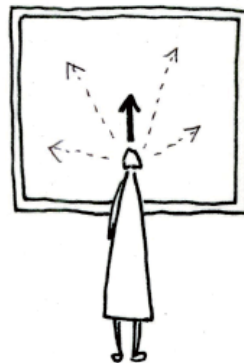
⁸ Hall 1990. P.93.

The Renaissance artists
-the conventional visual world



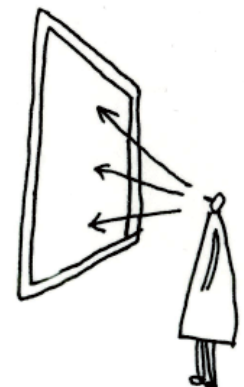
The viewer is kept constant to see
ocular composition of the object.

Rembrandt Harmenszoon van Rijn
-the stationary visual field



The eyes are kept constant in one
point to see how people views an
object and surroundings.

Meindert Hobbema, Katsushika Hokusai
-the visual experience



The eyes move to experience
three-dimensional spatiality.

“What is distance? I know that nothing which truly concerns man is calculable, weighable, measurable. True distance is not the concern of the eye; it is granted only to the spirit”⁸, said by Antoine de St-Exupery in *Pilote de Guerre* (*Flight to Arras*). Human lives in sense. All human actions are based on perceptions. Just after we wake up in the sunlight comes into our eyes, we feel softness of a quilt through skin and hear rustle or song of birds by ears. We smell morning coffee with our own noses and taste it with our own tongues. Five senses: vision, feeling, hearing, smell and taste, is basic perception that most of the people has from the birth and that build a basis of life. Although people aware only objects what they perceive but how they actually do, all the human deeds result from feelings based on sensory organs. Obviously it also plays an important role in architecture and art. People see paintings with eyes, listen to music with ears, touch sculptures through skin, watch and listen to dramas, smell pigment and materials with nose, and may even taste with tongue. Furthermore, architecture is multi-sensory expression. Perception deeply related to its spatial experience, therefore it brings interpretation of it.

Vision: experience of depth

Vision is an active sense. People focus their eyes on what they would like to see. Information from ocular faculty is enormous, thereby, vision is basically superior perception to the other senses. People see colour, shape, light, distance or even our own location through eyes. In addition, vision supplement other sensory experiences. We can imagine smell, texture, or taste of objects from ocular images, while the other senses hardly reminds us any other feeling. The linkage with several sensory experiences brings diverse interpretations, therefore ocular impression is one of vital elements in architectural and artistic expression.

Visual expression has infinite variations according to artists' views or historical backgrounds of art. Paintings, as things to be viewed, especially show various ocular techniques. Focusing on spatiality in this two-dimensional expression, some art pieces can be studied as examples.

Edward T. Hall made a comparative study of spatiality in paintings in his book, *The Hidden Dimension*. According to his theory, the differences on the visual field and the visual world in paintings are revealed. In the Renaissance paintings, the viewers were held constant to examine the visual organisation of the

Figure 1.4. Spatial perception of paintings from different perspectives.



Figure 1.5. Rembrandt Harmenszoon van Rijn "A Polish Nobleman". 1637.



Figure 1.6. Meindert Hobbema "The Watermills at Singraven near Denekamp". 1665-70.



Figure 1.7. Katsushika Hokusai "The Great Wave off Kanagawa". 1829-33.

⁹ Hall 1990. Pp.85-90.

¹⁰ Hall 1990. P.93.

objects. The artists treated three-dimensional space in a two-dimensional manner in the law of perspective. Consequently, the Renaissance paintings show views from a single stationary point. By contrast, Rembrandt Harmenszoon van Rijn paid special attention to how people see an object and its surroundings when eyes are kept constant in one point. In fact, his paintings look three-dimensional when one gazes a certain point from a certain distance. In daily perception, people perceive a single clear object with surrounding blurry images. Rembrandt achieved the perceived visual world in his paintings. Thus, the Renaissance paintings shows the conventional visual world whereas Rembrandt's shows the stationary visual field.⁹

In contrast to the above-mentioned artists, who treated the visual world in paintings, some artists in the same age focused on expression of the visual experience in paintings. According to Hall's study, a Dutch painter Meindert Hobbema painted a different type of view in more conventional ways. When one faces to his large, remarkably detailed paintings of country life from the distance of two to three feet (about sixty to ninety centimetres), he looks up the trees, down to the brook, and ahead to the scene in the middle. The viewer experience the scenery as if they look at it from a window.¹⁰ The similar way of communication to the sense of space is found in Japanese Ukiyo-e paintings. Katsushika Hokusai, for instance, achieved perceptual expression of space in combination of the Chinese conventional spatial expression and the Western perspectives in his most famous print *The Great Wave off Kanagawa*, one of the series *36 Views of Mount Fuji*. As a result, the viewers see the depth of space in the billowing sea, look down the people in boats, and then move their eyes up to the grand wave overhanging to the boats. In these cases, the viewers move their eyes throughout paintings to perceive the sense of space from different directions. Thus, some paintings draw the viewers into the three-dimensional world by letting them experience the visual space through a two-dimensional manner.

In paintings, this variety of spatiality is expressed in two-dimensional cutout views. Therefore, in some respects, the viewers objectively perceive the sense of space, or experience it only from a certain point facing towards a painting. These visual operations are applied in spatial expression of architecture, although its experience is not objective nor restricted anymore because of several factors. Firstly, people put themselves into real space in architecture. They can move their eyes to see objects, therefore, visual fields continue and create the ocular

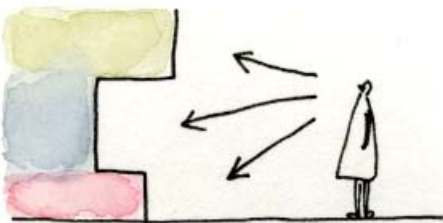


With consciousness of space, one perceives the whole in fusion.



One faces to individual objects without consciousness of space.

Figure 1.8. Perception of space and an object.



Ocular space
One distinguishes each objects.



Tactile space
One distinguishes an object and own body.

Figure 1.9. Ocular space and tactile space.

world of the place. Secondly, people can move their head to see objects not only in front of them but all around, so that views are not limited but continuous. Thirdly, people can freely move in space, that always varies the viewpoints.

In addition, real distance hugely influences the sense of space. Human sees an object differently from each distance. By contrast to paintings being looked from a certain point, architectural space is therefore perceived differently in each point. When people stand in a corner of a room against the wall, they can aware space by observing whole of it. On the other hand, when they face close to an object such as a wall, a door or a window, their architectural experience becomes an experience of object and the sense of space disappears from it. Thus communication to the space is also different in each distance. The spatial experience is visual when people see space from a distance while it is also tactile when we face close to an object.

Architecture has both two-dimensional and three-dimensional features. Two-dimensionality operates our views and controls what to be seen and what not to be seen. Three-dimensional distance adds it moving eyes. As people move in space, the view changes and the space is perceived differently. Putting human into actual space does not always require planar expression like paintings. However, spatial depth of architecture arise from it. Spatial experience differs in how space connected, how the wall appears and how views expands and are enclosed, results from all the architectural factors such as light, shape of ceiling, arrangement of walls and materials of floors. Visual factors can, for example, make space seem either bigger or smaller. As vision is highly superior to other senses, it gives huge influence on spatial experience. It is essential to pay special attention to its appearance for first impression of space and entire experience of architecture.

Sound: conversation with architecture

Effect of sound is often utilised in expression. In music, dramas, films and dance, atmosphere of theme is expressed through sound. Harmony of a melody and modulation of sound give the audience abstract impressions, in addition, sometimes detailed images are given through speech of lines. There is no direction in auditory sensation. Admittedly people perceive where sound comes, simultaneously they perceive the sound from any direction: direct sound from

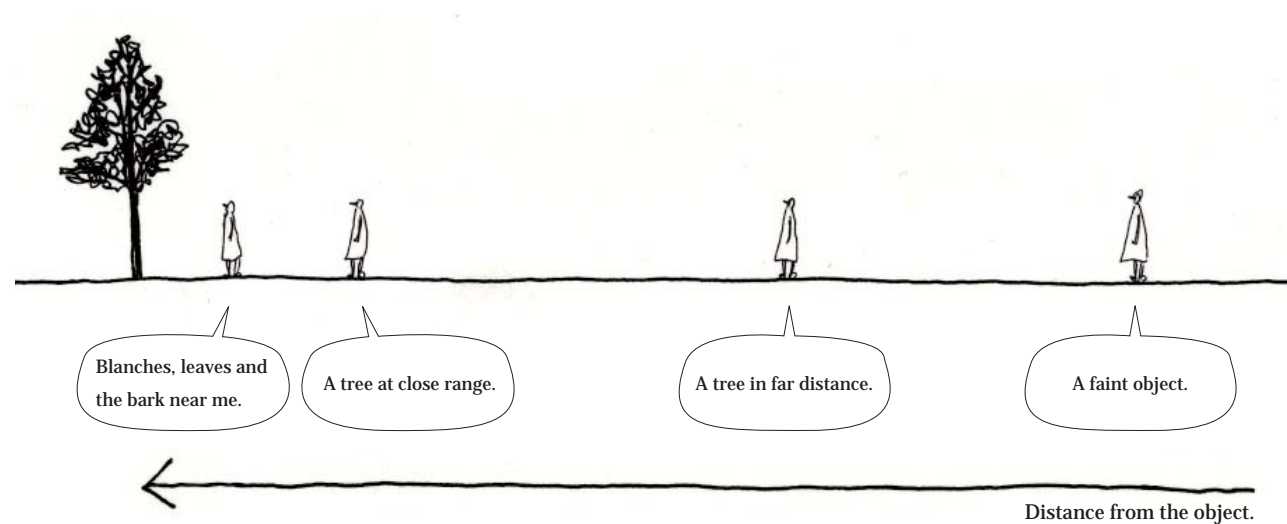


Figure 1.10. Perceptual differences in distance. One perceives the same object differently in each distance; clear details at close range and a faint overview at long range.

¹⁰ Pallasmaa 2005. P.49.

¹¹ Pallasmaa 2005. P.49

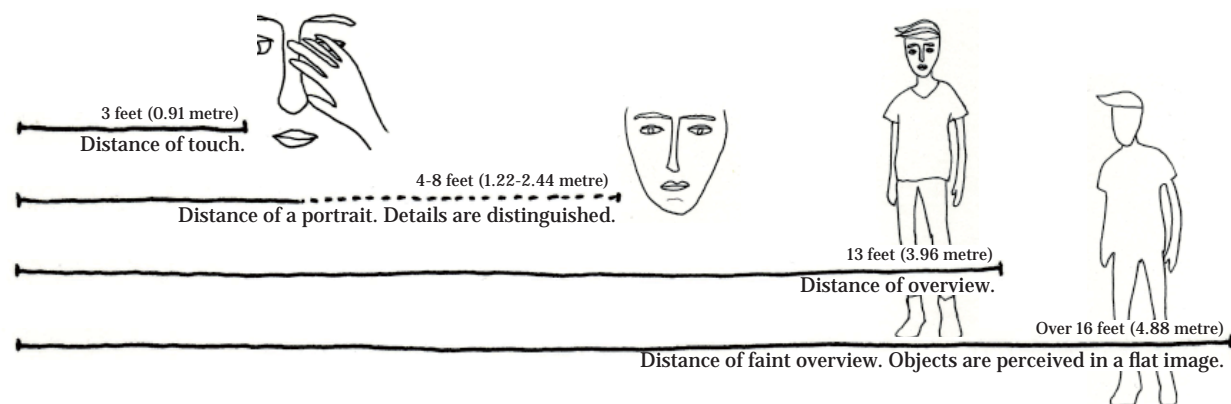


Figure 1.11. Different perceptions of human image in distance.

¹² Taiteilijakoti Villa Kokkonen.

ahead and echoes from side and back. In contrast to paintings to be viewed from one direction, sound carry audiences into a part of space of expression, surrounding them by sound effects.

On the other hand, it is difficult to treat sound in expression of architecture for some reasons. First of all, sound is seldom given from space itself. What people hear in architecture is in many cases the reflection of some others. Rain beats a roof. Wind blows through corridor. Someone steps up the stairs and opens a door. Many factors give sound to space, therefore auditory impression is more in a scene of the moment than in spatial expression.

Secondly, sound is one of the ways of communication to space. As one moves or speaks, architecture reflects the sound and returns it back to our ears¹⁰. In other words, space replies human action. Furthermore, it brings ones sound to the others, and vice versa. Through the reactions, people communicate with architecture and space.

The third is in a way of acoustic sense. *"The eye reaches, but the ear receives."*¹¹ People unconsciously receive sound. Consequently the memory of sound tends to be connected deeply to the empirical memory of space, remaining in its background. High reverberation expresses the space expands toward the heaven, and less reverberation gives a feeling of in placentas. Noise from outside let them think themselves as a part of society or nature, and insulated space brings awareness of loneliness. Hence, impression of space is obviously built by auditory perception in part.

Auditory expression in space notably appears rather in how sound is reflected in space than in what kind of sound it emits. The communication of sound between human and architecture thus originates in the acoustic. At times, architecture brings to human own distinctive auditory experience that cannot be derived from elsewhere.

Villa Kokkonen is a house for music, designed by Alvar Aalto for a Finnish composer Joonas Kokkonen in 1967.¹² It is considered one of masterpieces of architecture for music, attributed to its gorgeous acoustics of the atelier as well as the layout plan on the site, relation to the surrounding nature and elegant interior details. Melody grows in the hall and echoes beautifully. Then, it comes

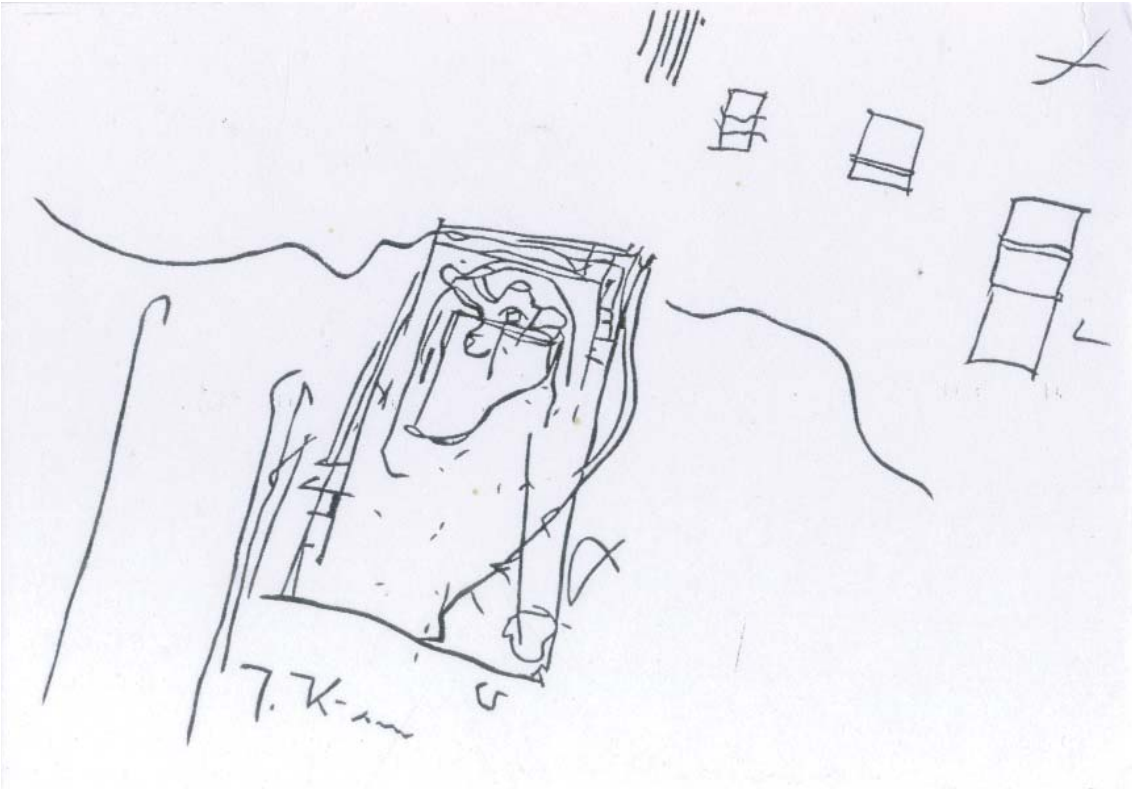


Figure 1.12. Drawing for Villa Kokkonen by Alvar Aalto.

¹³ From an interview to Elina Viitaila and Antti A. Pesonen. Interviewed on 9 October 2016.

into human body comfortably through the space. To audiences, experience there is not just receiving the sound by ears but feeling the melody and space with full of their own bodies, as if to be a part of the space of music. Music makes architecture more profound. Furthermore, it is not only for the audiences but also for the musicians.

Architecture changes music performances, declared by a pianist Elina Viitaila and an opera singer Antti A. Pesonen.¹³ Performing music concerts in the atelier of Villa Kokkonen at guided tours as hosts as well as at other music halls as artists, they have ever communicated with many different spaces through music. According to those experiences, their performances at Villa Kokkonen obviously differs from ones elsewhere. The particular acoustics of the atelier appropriately reacts to their music, simultaneously they answer it. More specifically, they changes the way of performance according to the response from the space. Communication between music and architecture thus creates original expression, which cannot be experienced at any other place.

Sound communication with architecture happen constantly for anybody, although it might be dearly minor. Most sound is not from architecture itself but reflection, so that it is hard to be recognised or controlled as a part of expression. Listening is a perception in distance. People catch sound out of eyes from outdoors, from neighbours and from the behind. There is no clear shape for sound, nevertheless, it gives opportunity to perceive space aurally to human. As its passive peculiarity, sound is unconsciously received. It deeply affects the impression of space, thereby, auditory experience latently remains in human memory. Sound is linked to a deep part of experience of space.

Touch: bodily contact with space

Visual and auditory perception defines the relation between one and others so as to give people the sense of position in space. Contrary to this, tactile sensation defines themselves. Sense of touch is a primitive way to recognise oneself from others. It is verified when one touches a thing. The thing is a part of one's own body if one feels to be touched, and if not, the thing is not oneself but others. Touching is the first step towards being conscious of own existence. Simultaneously, people perceive objects as others by contact. Touch gives them feeling of an object, if it is soft or hard, hot or cold, or light or heavy. In addition,



Figure 1.13. Imprint of tactile communication between architecture and human. The entrance door of Akateeminen Kirjakauppa designed by Alvar Aalto. 1969. (2009)

the shape recognised three-dimensionally, if it is solid or fluid. In tactile art, for example in sculptural art, people perceive muscular and pulsation of it by touch. In case vision arrives first, touching confirms what one sees through own skin. Tactile organ is thus the base of bodily contact to others.

Feeling sometimes does not follow direct contact. Skin feels the warmth in the sunlight and catches the flow of the air when someone passed by. Existence and movement of others occasionally reaches to the tactile organ through the air or temperature as well as direct touch.

Touch plays a significant role also in architectural expression. The “*only sense which can give a sensation of spatial depth is touch, because touch ‘senses the weight, resistance, and three-dimensional shape (gestalt) of material bodies, and thus makes us aware that things extend away from us in all directions’.*”¹⁴ People feel the floor or the wall through its texture and temperature by touch and know three-dimensional shape of it. To open windows or to shut doors let people aware weight of them, additionally it also makes space expand and contract. People and space thus interact each other. In addition, temperature deeply affect the spatial experience. “*I believe every building has a certain temperature*”, Peter Zumthor said¹⁵. As brooks in the forest wear pure coolness, or as the wind of the desert brings dry warmth, architecture also has its own temperature. At times it comes from the heat from the original materials, at times comes from the sunlight from the window. Some materials react to heat from the human body.

Similarly to the sense of hearing, the sense of touch is also a way of communication to architecture. People get spatial impression from the temperature of building, feel the architecture itself from direct contact by body, and consider themselves to be a part of the space by interaction with it. Tactile communication with space brings the experience of the depth of architecture.

Human always touches something. Passive tactile sense makes people be conscious of others. They know where they stand with the feeling of the floor and recognise the sun direction from the heat of sunlight. On the other hand, active tactile sense brings them communication with other objects and space. People enjoy confirming the texture of an object and build relationship with it through bodily contact. Tactile experience is a conversation with expression, at times re-

¹⁴ Pallasmaa 2005. P.42. Pallasmaa referred to Germany philosopher, G. W. F. Hegel's words.

¹⁵ Zumthor 2006. P.33.

ceived, at times responded. Furthermore, feeling through skin ordinary follows it. One’s own body is perceived with expression in tactile sense. At the time, expression and body become one.

Smell: memory of time

Wake up in the morning and go wash the face at the bathroom, feeling the wet fragrance of the water and soap. Move to the kitchen filled with the savoury scent of soup. After the meal, take a cup of aromatic coffee and read a newspaper emitting the smell of paper and ink. Then go out to realise the rain hitting the earth. In the humid smell of the wet ground, walk in the lawn, sending out the green scent of from the trampled grass. Human beings live in traveling among various smells. Things, deeds, weather and the air, everything emits smell. And people receive it. The stomach rumbles in the scent of meal and one feels the age in a musty odour. Sense of smell builds empirical memories and reminds it.

Every architecture has each smell. Materials, such as wood, stone, concrete and steel, all have inherent smells, creating the original olfactory experience of the building. Moreover, function adds the scent of life. The laundry leaves the fresh fragrance of softener in the laundry room, and cooking fill the room with the delicious smell of meal. Inside sauna in use is full of scent from burning firewood, heated stones and steamed timbers of the room and benches. Not only deeds but humans and objects take parts it: bed clothes dried under the sun in the bed room and old books and the ink in the library. Rooms for the youth often smells young and sweaty as well as grandparents’ rooms in aged odour.

Time additionally changes smell of space. The living room filled with the scent of coffee in the morning turns into full of other smells in the daytime: one of paper and ink from letters, one of cleaner and ones from the children’s toys. A house, full of fresh abundant wooden scent in the beginning, has been getting on over years, then turns into the seasoned house with layered smell of life. One feels the other’s existence in a lingering scent from the person. Nose sensitively receives either smell of the moment and of the age. Any kind of smell builds the olfactory sense of the moment, and instils it into the memory.

All the architecture factors, materials, human deeds, people and objects, effect the peculiar olfactory experience of space of the moment. Although it tend to

¹⁶ Pallasmaa 2005. P.54.

be out of consciousness, the instilled smell in mind occasionally awakes a vivid memory by chance. The musty odour of old cupboard in the storage reminds ones the clear recollections of hide-and-seek in their childhood, even if its vivid images had been forgotten. According to Juhani Pallasmaa, “*(t)he nose makes the eyes remember*”¹⁶. And it continuously changes as time passes. The sense of smell is a memory of momentary scenes and the perception of the flow of time.

Oral perception: taste of space

Similarly to other senses, it is absolutely possible to perceive the architecture with oral sense. People would feel the smooth texture of marble stone or taste the abundant flavour of wood. Every building has own proper taste. However it is hardly perceived since tasting architecture is not in the usual behaviour in human ordinary life.

Oral experience of space exists rather in the sense of taste that have been perceived in there than in the actual taste of building. Namely, the sense of taste is greatly influenced by space. A formal dinner in a superb hall turns the conduct of whole eating process into ritual, whereas any high-classed taste tends to be perceived more familiar and casual at the picnic on the lawn under the shining sun. Having a mug of beer on the lake shore in the forest after sauna tastes different from one in the bustle in a lively bar. Thus, spatial atmosphere is highly significant in oral perception.

The sense of taste firmly relies on other perception. For example, in-flight meals are seasoned more strongly than normal meals on the ground since the loud noise from machine and engine effects less perception in taste. Contrary to this, the quietness brings a exquisite sense to the tongue. As regards smell, most people probably have had experience in feeling no taste with a stuffy nose. Similarly, any meal is perceived poorly in a room of strong smell, no matter if it is elegant fragrance from perfume or terrible odour of animals. Tactile sense also plays a key role on it. Feeling the texture and temperature of food gives huge impression of the taste; well-boiled rice tastes different from firm one as well as frozen fruits from ones in the room temperature. Not only touch to food in the mouth, sense of space on skin also influences taste. A bowl of soup at the chilly outdoor market and one in a warm living room with fire place have distinct deliciousness.



Figure 1.14. Light from the water reflection in the darkness of Japanese architecture. Shikunshien. (2010)

¹⁷ Saerberg 2007. “The Phenomenology of the Dark Meal”.

¹⁸ Tanizaki 1977. Pp.16-17.

¹⁹ Tanizaki 1977. P.16.

Among all senses, what taste relies on the most is definitely vision. People first see what they are putting into their mouth, then taste follows it. Therefore, taste is mostly recognised insufficiently and eating experience gets poor under limited condition of sight. A research of meals in the darkness illustrates the dominance of vision. When vision is no longer reliable, diners intensify their attention to taste and smell. However, in case they do not exactly know what they are eating in darkness beforehand, they rarely recognise the food in their mouth. Some does not find out if they are eating a potato or a slice of cabbage while some considers soup of limes as one of tomatoes. The fact that blind people have no difficulties on sensing the taste under the same situation evidently describes that eye impoverishes the sense of taste.¹⁷

In a different way, Junichiro Tanizaki also refers the importance of vision on taste. From his own experience of food in dark room with the faint light of a candle, he describes the beauty of Japanese meal originated from the dimly lit space. Miso-soup in muddy, clay-like colour in a black lacquer bowl or thick soy-sauce served with raw fish acquires a real depth to be infinitely more appetizing in the gloom. Similarly, the beautiful white colour of rice in a glistening black lacquer cask stimulates the appetite strongly in the steam in dark, that can never be exactly derived on a bright room.¹⁸

Oral sense of space rarely comes from the exact flavour of a room but from the experience of taste affected by space. The tongue perceives taste differently, according to the atmosphere of the room and the other senses arose from it. Even if one eats an exactly same thing in several places, the taste varies. Eating is thus deeply related to space. *“(W)hen yokan is served in a lacquer dish within whose dark recesses its color is scarcely distinguishable, then it is most certainly an object for meditation. You take its cool, smooth substance into your mouth, and it is as if the very darkness of the room were melting on your tongue; even undistinguished yokan can then take on a mysteriously intriguing flavor”*¹⁹. Then, how do you taste the space?

Human senses and the perceptual world

“Backside of the Moon” is an art of the light by James Turrell, enshrined in Minamidera, literally means “southern temple”, designed by Tadao Ando. The

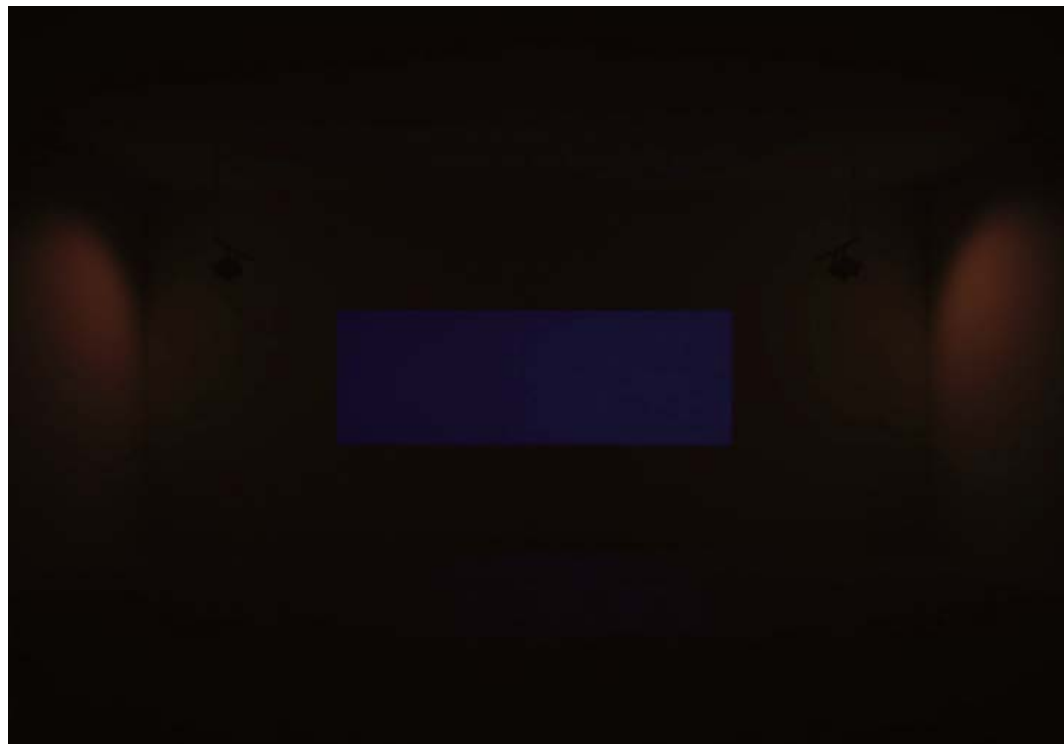


Figure 1.15. James Turrell. "Backside of the Moon". 1999.

empty room consists of only benches next to the entrance and the faint light facing to them at the other side of the room. The indoor is extremely dark, and so one can first see nothing but the darkness. With a lead by a staff, one enters the room through winding corridors to benches, keeping the hand on the wall throughout the access. After groping for the seat, one stays on a bench in the dark and the quiet, then after a while, starts catching the slight light gradually as the eyes adjust to it. When leaving, one is free to walk in the space by oneself, and can see where to go, catching the dim brightness of sunlight from outdoor through the entrance which used to be in the total dark ten minutes before. Most of them no longer requires following the wall.

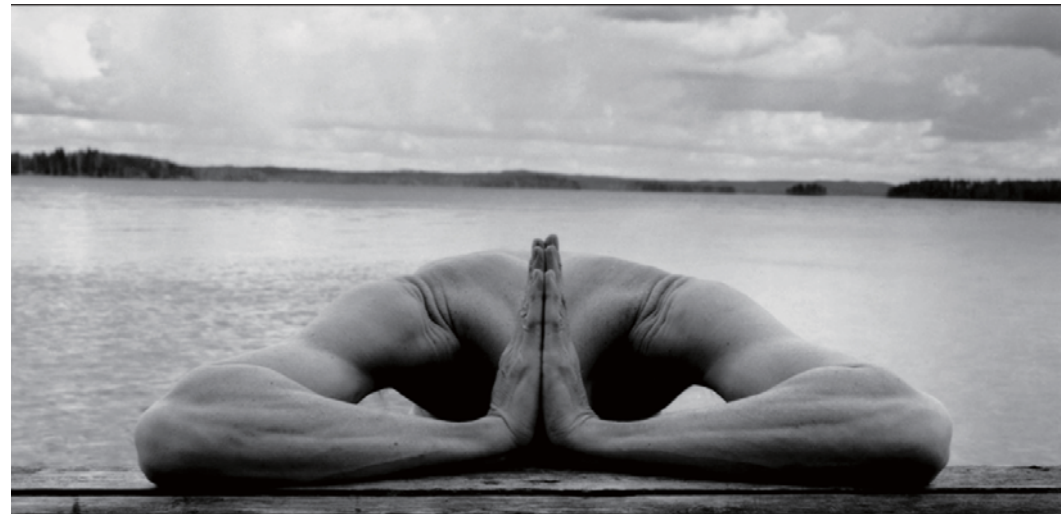
Perception comes in turn there. Tactile sense makes first contact to the building: hands follow the wall, feet feel the floor and buttocks and back touch the bench. While groping for the seat, people sometimes recognise the existence of the other person by touch. Sound comes next. The guidance by staff echoes in the room to let visitors feel the aural space. While people settling themselves in the quietness, the ears receive the faint rustle and breathing of the others and listen for the very tiny sound emitted from building. Exquisite noses simultaneously perceive even the negligible smell of space. Vision follows the other senses at the end. The eyes, catching only the black view, gradually start recognising the things in the dark. People see what have already been experienced by the other perception and get clear visual images of space: the benches where they settled themselves, the entrance that used to be full of darkness before and the entire form of space. The whole experience is closed with a surprising brightness of outdoor after going out, even in the rainy days. Although the eyes catch the dark from the beginning, other visual images, usually perceived from the very beginning, comes only in the end of experience. Thereby, each sense becomes sharpened well than usual. In this visually-limited architecture, people experience the sensory space differing from each sense, by following the order of the appearance of perception.

Perception of space of the moment is deeply related to deeds and mood of a person, additionally, the environment accompanies it. In the above example of "Backside of the Moon", weather results in different experience: one sees the dim brightness of light earlier in cloudy days while brilliant sunshine leads one to the deeper darkness, depending on the time required for ocular adaptation to the environment. Among these temporary factors, space and human interact

²⁰ Zumthor 2006. P.41.

²¹ Hall 1990. P.84.

²² Zumthor 2006. P.69.



²³ Zumthor 2006. P.23.

each other. What can be surely said is that architecture is always there to receive human in every moment. Architecture is a spatial art, and at the same time, is a temporary art²⁰. Space never changes its physical form, nevertheless, its experience is various. Thus, architecture, as a steady structure, becomes temporary in the perceptual world.

Most communications are abstractions of events that occur on multiple levels which are generally not apparent at first²¹. Architecture expression consequently comes into the body through full senses, piling up the layers of this abstractions. All these phenomena refers to each other, so that no elements can be removed without destroying the whole. Place, use and form, when things have come into their own, architecture is as its most beautiful²².

Human perception is uncontrollable and is beyond calculation or measure. When people see the visual image of the room in the darkness of above mentioned art, some says, “Now I know the true size of the room. It is somehow different from what I expected when I did not see yet.” Although people tend to consider what they see as the truth, there are many facts in each perception in different ways. Just as the space perceived with eyes is the truth in visual sense, so too the one with ears is the truth in aural sense. That is to say, architecture never has clear steady form in perceptual world. Peter Zumthor states, “*Really, I mean the word <body> quite literally. It’s like our own bodies with their anatomy and things we can’t see and skin covering us - that’s what architecture means to me and that’s how I try to think about it*”²³. The body exists in the very core of experience, collecting the things around, perceiving this and that, and creates the own perceptual world. Architecture, which receives people and experienced through their body, is hence an extension of human body, equally, people is a part of the architecture body.

Figure 1.16. “Do people possibly sense the body without the benefit of a head, I wonder?” Arno Rafael Minkinen.

1-5. Perception under cultures and ages

Divergences of perceptual experience

When people speak, they usually say only part of the thought. What is not expressed is left as an axiomatic matter to be covered by understanding of the listener.²⁴ Therefore, the various range of interpretation appears in reading omitted words. In other words, experience of the words consists in perception of the expressed object and in thought on the unexpressed thing. However, cultures vary in its process. The omitted thought and the interpretation on it profoundly proceed from the culture and the age.

It is in no way peculiar to speaking. According to Edward T. Hall, paintings are abstraction depends in vision. Painters distil a part of subjects into constitution organises more clear tidy expression. That is to say, “*one of the principal functions of the artist is to help the layman order his cultural universe*”.²⁵ Artists’ powerful representation builds up a new cultural horizon which is hardly achieved by laypersons and gives them a new impression of the world.

In some paintings, its ocular abstraction arouses other senses. It makes people remind sound of the wind, taste and smell of the fruit or heat of the skin, furthermore, those responses are occasionally even close to those from the original stimuli. However, this phenomenon ideally consists only in the common cultural sense between the artist and the viewer. People in the tropic will have difficulty in understanding the grateful heat from the fire in a hut in the middle of snowscape. The ancient wall paintings in caves are conceived to represent shamanistic efforts to control the nature beyond ordinary human understanding, consequently it is difficult to get its true meaning for the people today. There is no ways but to imagine the scenes. Cultures and ages behind people thus play

essential roles to experience expressions.

Architecture is not an ocular-based abstraction. Perception occurs on multiple levels in three-dimensional expression, in addition, human actions participate in it. The spatial expression evokes deeper sensory experience. Thereby, people hardly realize cultural gaps between architectural expression and their own experience, although, in many cases, their spatial perception decisively differs from one of when and where the architecture was built.

In Egypt, for example, their preoccupation with architecture was obviously in settling the religious and ceremonial structure in correct orientation and alignment in the cosmos. They accurately captured a north-south or east-west axis with magical implications and quested pure geometric form to represent the super-nature in a symbolic manner.²⁶ The relation between human and space was entirely out of consciousness, owing to this, closed indoor spaces had been left unconsidered. Accordingly, their structures have totally different meaning from what consciously perceived by people today whose sensory organs grow in the memories of the relation between body and space.

Besides, cultures vary spatial sense even for the people in the same age. To Hopi, a native of the northern Arizona desert mesas, the concept of space and time is completely different from the others’. In their thought, ideas on space and time are inextricably bound up in an inseparable constitution, hence there is no word equivalent to ‘time’ in English. In addition, they cannot get the idea with special depth in the absence of the sense of imaginary space. This accordingly deals the real space in real but not in elsewhere. Space does not really gets named as objects but is being perceived in the relation and the location between other things.²⁷

Although the instances above are somewhat extremely cases, expressions indeed contain such cultural and generational meanings, which occurs multiple understandings on same objects between people in different culture and age. The gaps in perception of space, however, brings architecture into more profound expression. One architecture would be exceedingly difficult to be understood for some people while others can intelligibly perceive it. Perceptual gaps consequently bring new experiences of space, adding renewed worth on architecture.

²⁴ Hall 1990. P.102

²⁵ Hall 1990. P.81

²⁶ Hall 1990. P.83

²⁷ Hall 1990. Pp.92-93



Figure 1.17. The flood of visual information weakens the own empirical memory of perception.

Perception today

In ancient days before letters came into the world, words existed as sound. Human experience based on their own perception and informations were transmitted only by speech. However the appearance of letter shifted words into a visual field. Moreover, after centuries, picture appeared, which more and more made ocular sense establishing its superiority to others. Today, even videos prevail in media. New technologies allow whomever capturing a real with moving images and sound, at times in clear organised information, at times in dearly vivid recordings. Flood of filmed reality accordingly results in the new perceptual world. The reality used to be perceived only through own senses started becoming pseudo-experiences through recorded memories of other people. Derived knowledge by information thus started compensating actual bodily experiences in real.

The obvious rise in superiority in vision intensified consciousness of ways to be 'seen' in expression. Today, information does not need to be searched but is automatically delivered to public via television, radio, newspapers, and the internet. People learns what happened in the other side of world without searching but receiving. Active property of vision is thus getting weaker, shifting to be more passive. The world is now perceived not in own active senses but in passive information coming from other people's experience.

Architecture is what has been in human daily life. As it brings human standard into the nature²⁸, whoever experiences human world through architecture. It is experienced with full five senses over time and space. The memories of perception are accumulated in spatial experience and build up the foundation of self-consciousness and self-understanding of the world. In the current society that knowledge complements experience, expression of architecture perceived by human body would be more essential as a clue to build the perceptual world.

²⁸ Refer to "1-1 Architecture for human", P.8.

Body, space and experience

1-6. Architecture and Body



²⁹ “Shusaku Arakawa, an artist makes all things reversed” 2014.

Body as a basis of experience

We all experience the world through body. Body is human itself, the centre of the perceptual world, beginning of actions and a mean of expression. Our mind originates in bodily perception, and the result of thought expressed through body. Therefore, body is both a basis and a result of human.

Awareness of one’s own body begins just after coming into being the world. Shusaku Arakawa, an artist and an architect, made a study on new-born infants for a decade and found they recognise themselves from others by moving their bodies. If the floor does not move along their action, they learn it is not a part of them. After they become conscious of themselves, then they start to utilise their own bodies to know others: if it is hard or soft, hot or cold, or living or not. Understanding “I” and others, they also learn their position in the society, if each is a person as me or a person as a part of group. They understand others and aware themselves by perception through their bodies. This is a beginning of the process to create their own senses. Moreover they make gestures in order to supplement the expressive faculty of language. The body also functions on expression.²⁹

Arakawa’s spirit of inquiry is formed in his peculiar art work, *Ubiquitous Site/Nagi’s Ryoanji/Architectural Body*, inhabits the Nagi Museum of Contemporary Art with his associate artist Madeline Ginz. A pair of small replica of notable Ryoanji rock garden is arranged on both left and right side of the wall around a cylindrical room. One also sees symmetrical pairs of benches and seesaws hung from the top and the bottom of space. A centre axis out of upright allows no stable place in the room. Sun light streams in from an end of cylindrical room so as to create the different strength of light all around the room.

This unstable space deprives human balance, that is, new several centres of balance are created outside of the body. It is required to rebuild the senses and body to recover physical balance. At this moment, the sense returns to the babyhood, being free from all existent perceptions based on own experiences of the past. All the symmetrical objects surround a person in unbalanced space, therefore what one sees appears unexpectedly again while staying in the space. When people meet the same object several times in different sense of balance, they fall into chaos where they are forced to rely on their own senses. Thus new consciousness of oneself arises. One faces to oneself with virginal perception in



Figure 1.19. The place to encounter own new sense of body. Seeking own new centre of gravity. Site of reversible destiny in Yoro, Japan.

³⁰ Tokumaru 2009.

³¹ Maruyama 2002. Arakawa had pursued the eternal life with the concept of *the Reversible Destiny* through his art works and architecture. He tried to reverse the fact human dies. He paid special attention to unknown phenomena creating environment, and examined how much and what kind of phenomenon is required to be piled up for eternal life.

³² Tokumaru 2010.

unbalanced continuity of discontinuity and build the new sense of the moment in the physical unstability.³⁰ The experience of space here is continuity of moments. There is no connection between each factors. Arakawa sought the meaning of 'life' in eternal pursuit of temporary phenomenon.³¹

His theory reveals the innocent sense of human body. One encounters the primitive human sense and new consciousness in eccentric space without familiar stability of gravity. Experiences or memories of the past make no sense in continuity of unbalance. One meets the new sense through brightness, darkness, or centre of balance that had never been experienced before. One then realises that the sense result from the past experience is still temporary and incomplete. The body is where perception comes down, and perception results mind in the body to be a human. Therefore to encounter new sense is to realise provisional oneself who had lived in temporary sense.³²

Architectural space is stable and balanced in many cases. Therefore our experiences and memories of the past are strongly related to our spatial experience. We already know how to behave in common balance. However even if space is stable in balance, its situation continues varying constantly along human daily life contained in it. At the same time, human does not face to the space in the same mental and physical condition all the time. The living room in the morning sunlight just after getting up, and the same room in rainy weather after whole-day hard working are differently experienced mentally, physically and environmentally. It namely means people perceive the place in new situation all the time, in consequence experience of architecture is more or less continuity of encounter with the new perception. Architecture is able to be interpreted as a device to rebuild the sense, hence the origin of architecture is precisely body, a thing to create perception.

Human as a phenomenon

Everything in architecutre moves people, as people do to architecture. Architecture requires human intervention in it, or it will be an only structure. Now what is human as a factor to make architecture what it should be?

In space in architecture, people recognize the existence of others. They feel others not only by talking nor touching directly but also by listening to someone's

footsteps, hearing someone coughing, seeing silhouette moving and finding other's traces of having been there. All human actions are perceived as a part of architectural experience by others. In other words, human becomes a factor to bring a phenomenon into space.

Living as human is basically a continuity of phenomena. People continue breathing and moving while being alive. When moves, one of the moment disappears and then the new appears. It is as if there are many 'I' exists, and I hide previous me to be a new.³³ One in the moment is different from one in any other moment. Namely, one's motion as a phenomenon following the previous one leads the new one. Thus life is continuity of ephemeral phenomena.

When such momentary space continues to appear by turns, the continuity creates permanent place, that is, architecture. Spatial environment of architecture changes momentarily, following human action. All phenomena possibly effects the space, from distinct motions such as moving of windows and doors, transfer between rooms and standing up from chairs, to vague changes such as variation of the light and shadow, flow of the air and reflection of sound. The space results from human deeds is as ephemeral as they are so. Additionally, the phenomena of different actions sometimes appears at the same time and interact each other so as to result following ones.

This is simply exemplified in the case of choosing a seat. When one comes, for example to a cafe, the parson chooses a seat wherever he likes, according to architectural triggers: wall arrangement, distance from other seats, position of windows, and the others. This action simultaneously results from space and simultaneously changes it. One's motion create new space, differs from the moment before, by varying the light, shadow, wind, sound, and all other relative things. The next one comes to take a seat, unconsciously being affected by the first person. The space where the second came is different from the original. The first one is practically perceived rather as a part of space than as a human at some point. At the time, the man becomes a phenomenon for another. The second person chooses a seat in the space already influenced by the previous one, considering the distance between them. Thus both architectural space and the first person effect the motion of the second one, who also gives changes to space as another did. Thereby, the first one perceives the different space from what it used to be before another comes. Even after one leaves the place, phenomenon

³³ Tokumaru 2010.

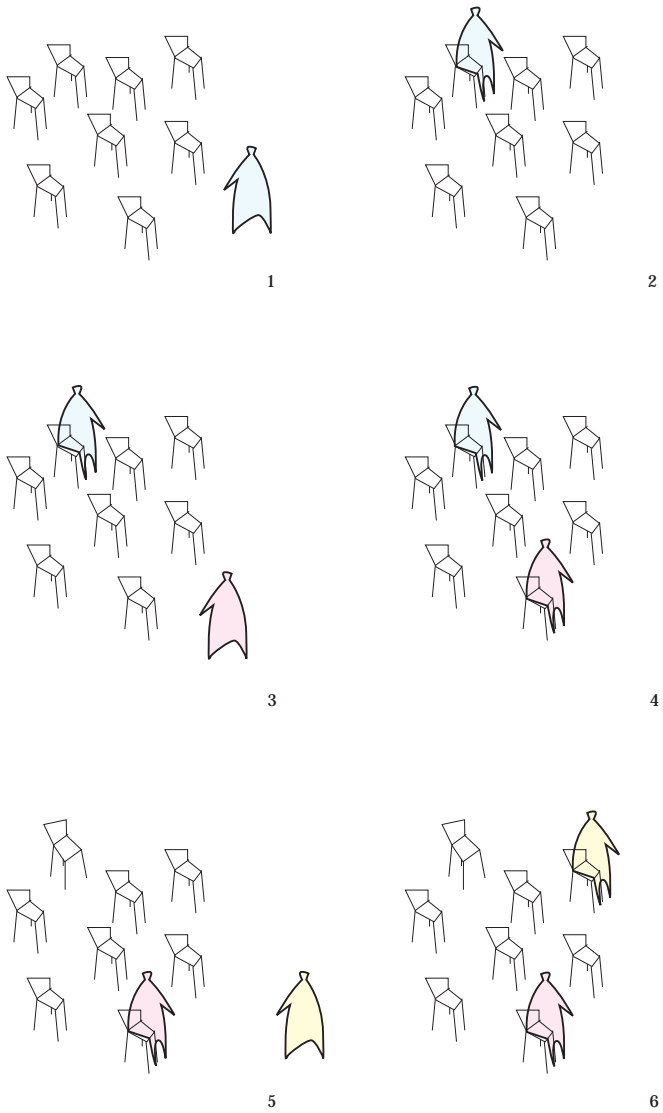


Figure 1.20. Human as phenomena unconsciously affect each decision.



³⁴ Tokumaru 2009.

from him remains and affects the followings indirectly. If the third person comes after the first one left, his action follows a phenomenon of the second one, which is already affected by the first one. In this manner, phenomena constantly interact and trigger each other. The centre of space is ubiquitous.

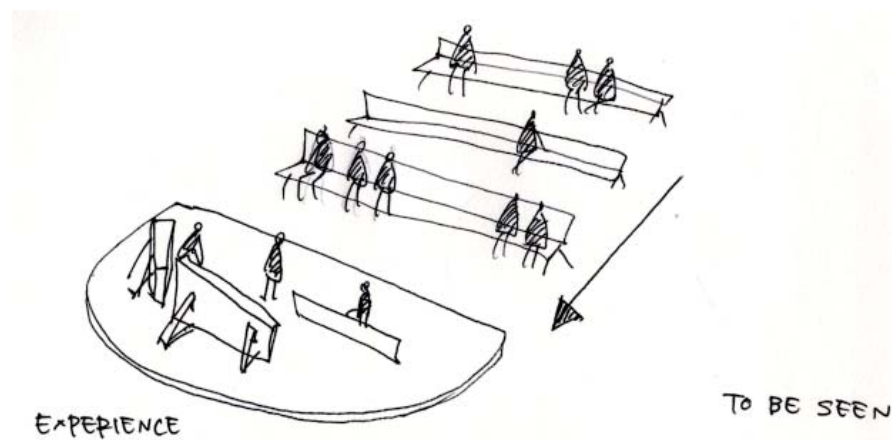
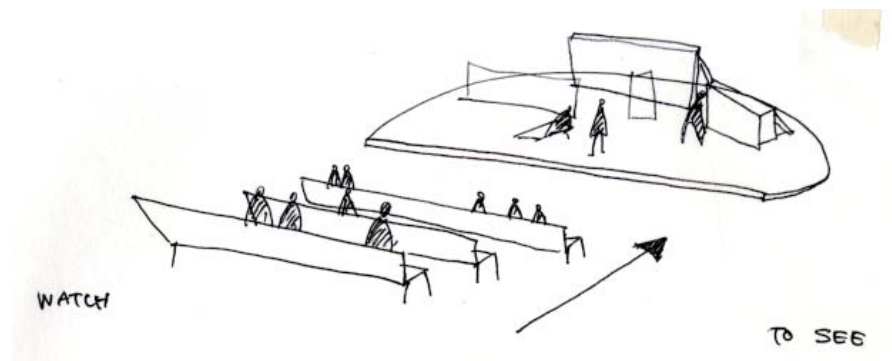
Experience of architecture is not momentary but consecutive. Continuity of momentary space is perceived as spatial experience of architecture, likewise continual appearance of ephemeral phenomenon builds the eternal space. Consequently, the body leads phenomena that are principal factors of architectural experience. As human body moves, so architecture changes according to traces of various phenomena and ubiquitous centre of space. It is as if architecture is alive and breathing along the human, giving multiple spatial perceptions from one structure. Considering human as an architecture element, it is sufficiently conceivable that intervention of the body and deeds lead architecture close to its completion, although it never ends³⁴. Human receives perceptual incentives from experience of the space as one gives phenomena to it, in consequence interaction between human and space makes a place architecture.

Space as an extension of body

Pina Bausch, one of the most admirable choreographers, had sought potentiality of expression through contemporary dance with the Tanztheater Wuppertal. In her stage, dancers dance in various obstacles. They dance on flowers or soil covering stage, among the chairs, or in a puddle. A huge rock sometimes appears on the stage while dancers dance out of the theatre sometimes. Obstacles on the stage bring out the potentiality of bodily expression by disturbing to restrict their movement. Dancers dance as human. They utilise full of their own bodies and space in limited situation to express sadness, rapture, love, and all the feelings. The emotion of the soul overflows from their body dancing vehemently among obstacles on the stage. Mind and body lost boundary so as to unite with space into one. Thereby, the space becomes an extension of body and a part of expression of the dancer. All the things on stage, body, mind, space and obstacles, are perceived by the audience as integrated expression. Thus, the audiences perceive space as an extension of body and dancers dance space.

Some theatrical directors furthermore incorporate architectural character into essential spatiality in bodily expression on stage. One of them, Frédéric Fla-

Figure 1.21. Pina Bausch, Tanztheater Wuppertal "Vollmond (Full Moon)". 2006.



mand, has directed stages in collaboration with architects and designers. In each stage, body confronts with geometric settings imitating architecture on stage based on different themes. Bodily expression of dancers are simultaneously obstructed and led by the settings occasionally stable or unstable. Besides, dancers freely utilise their bodies throughout space in some programmes, accordingly space reacts their movement momentarily. Body and space thus interact each other here, likewise architecture.

In these cases in theatre, there is a relation between the performer and audience. Performers experience space through bodily expression while the audience only view it from outside as a third party. Interaction between body and space is prominently expressed in the definite relation of ones to see and to be seen, that is, a theatrical arts as shows. It is as if the stage is a section of space showing the temporal communication between space, dancers and their performance, and the audiences are watching it from outside.

The stage has common spatiality to architecture. Dance and architecture are the only expression formed with human body. One perceives space not only with few senses but through the whole body. Space leads human act by stimulating one's perceptions. Body expresses mind. Accordingly, expression as phenomenon blends into space to be a part of it. Human, then, becomes a factor of spatial expression. As architect Jean Nouvel said "a building is a lasting architecture and dance is an ephemeral architecture"³⁵, dance has certainly architectural character in its spatial expression of a moment of a particular programme.

Many of architecture is the space of daily use. People generally live in architecture everyday. By contrast to dance whose expression utilises both body and space, architectural expression is a building itself and body comes into it after its completion as structure. Consequently, bodily movement in architecture is not expression but constant results of trivial daily action. As human always changes, so architectural space varies all the moment along people action. As a result, body, that is not originally included in architectural expression, creates the momentary space that is experienced as a part of architecture. Therefore architectural experience is something unpredictable. This complex relationship between expression and experience is peculiar to architecture.

There is no relation between performers and audience in architecture. There-

³⁵ "Feature 2: Perceptual Space" 2009. P.182.

Figure 1.22. Different experience of the same expression of stage.

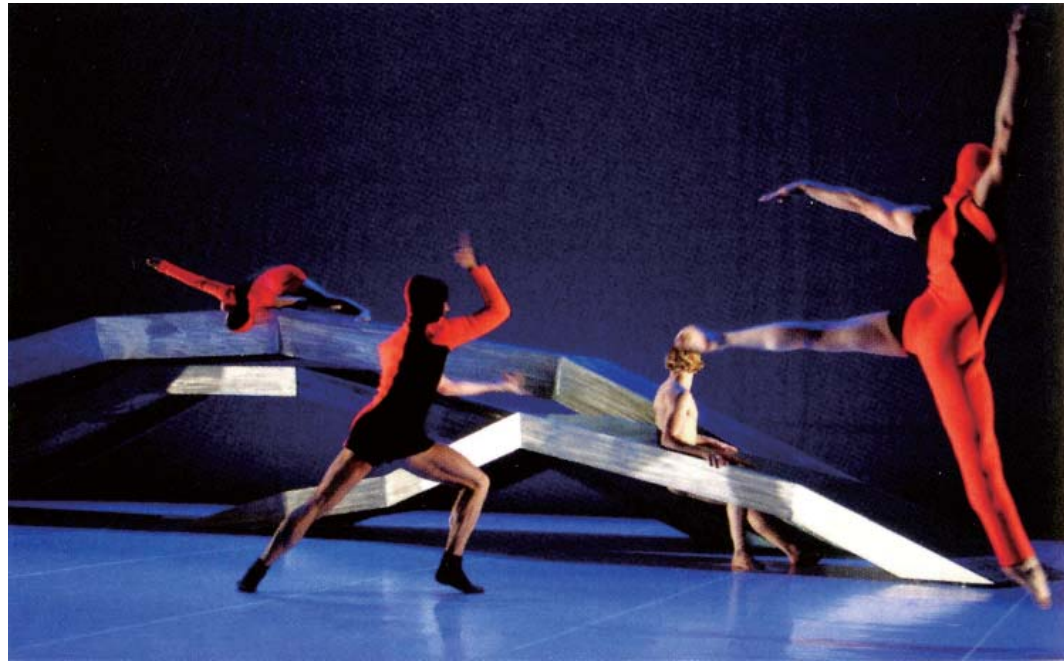


Figure 1.23. "Metapolis". 2000. A Stages in collaboration between Frédéric Flament and Zaha Hadid, performed by Ballet National de Marseille.

³⁶ Pallasmaa 2014. Pp. 12-14.

fore conversation between body and space might not be as striking as dance since it is not emphasised as expression nor it is not objectively perceived. However people evidently live in its interaction. The easiest way to aware it is simply to move. Stretching your arms, you see your shadow moves on the floor and may feel the different temperature in the light or may reach to the wall or ceiling. Standing up from a chair moves your eyes to provide another view. If you walk around, it makes the flow of the air and sound of your footsteps. When opening a door, you directly touch the building, that gives you the feeling of weight, temperature and texture of it. Or if you play an action in various speed, slowly, usually and quickly, you would realise that the place seems differently. You even transform the size of space, connecting separated rooms into one by opening it. Human beings as phenomena changes space. Deep experiences of architecture are thus action instead of objects. Fundamental architecture space is based on verb. The window is an invitation to look outside instead of opening itself, the floor to stand up and act, the stairs to go up and down, the door to pause and go through, and facade to feel physical being instead of form of it.³⁶ People perceive architecture through action.

Furthermore, body is not the only thing to yield spatial experience. It has resonance with all the architectural factors: texture of materials, the light and dark, the air, heat, sound, form, the nature, and any others. They always build temporal space, hence there is no fixed point in our sense. The centre of our perception is constantly created in every moment and is ubiquitous among the variable space. The architectural spatiality of the moment and our sense of the moment combines together so as to yield the momentary experience of architecture.

Arakawa understood architecture as a thing to construct our life and consciousness. "Architecture is what appears when I pronounce 'I', to build it outside of me, to construct it, and to think its directions for use. It differs from a building."³⁷ It is possibly interpreted as follows. That is, 'When I live as me, my action never stays in my body but overflows into outside of me to change the surrounding environment. It is then constructed as space. This is architecture. We never experience architecture until we face to the constructed space, not to a building itself.' It is not just a structure and also differs from dance. Space becomes real (architecture) from fiction (art) just as our body intervenes in it³⁸. Architecture is born in combination of human, space and all the other factors. The very beginning of everything is body.

³⁷ "Shusaku Arakawa, an artist makes all things reversed" 2014. Translated by Maitani.

³⁸ "Shusaku Arakawa, an artist makes all things reversed" 2014.

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Chapter 2. **Kalevala**

Kalevala as a Finnish national epic

2-1. Introduction of the Kalevala



Figure 2.1. Knutson Johan, “Elias Lönnrot”. 1841.

There are uncountable numbers of mythology existing over the world. Most of the countries have their original oral tradition, and so does Finland. Having been transmitted by ancestry over ages, Finnish ancient spells, poetry and folklores have taken over the indigenous notions of ancient Finns. Later, those oral traditions were collected and were organized into one literary work. That is Kalevala. As a national epic of Finland, it grew into widely-known literature, being considered one of Finnish representative culture. In this thesis, the Kalevala is dealt as a clue to comprehension of authentic Finnishness to be transformed into architectural expression in the following chapters. Before the analysis of the vernacular notions behind it, the origin of the Kalevala and its author Elias Lönnrot are firstly to be referred to.

The first journeys of poem collection and publication of precursors

The author of the Kalevala, Elias Lönnrot, is widely said to be a first and foremost collector and editor of folk poetry. Being born in 1802 in Sammatti, southern Finland as a son of a poor village tailor, he commenced initial survey on folklore during his student age in the Academy of Turku, where he studied literature as well as medicine, history, Latin, and Greek. He met one historian, Reinhold von Becker, as his teacher through a circle of promoting Finnish language.³⁹ Lönnrot was allowed to access to collections of folk poetry and notes on mythology so as to complete his doctoral dissertation *De Väinämöinen priscorum fennorum mumine 1827* (Väinämöinen, the god of ancient Finnish 1827), under the guidance by the teacher⁴⁰.

After the graduation, Lönnrot travelled over thousand kilometres every year from 1828 to 1844 for folklore collection. He first focused on north-eastern Karelia as a repository of folk poetry, referring a previous publication by Z. Topelius. In his first journey in 1828, Lönnrot succeed in meeting a singer, Juhana Kainulainen in Kesälahti in Finnish north Karelia. He worked up the poetry into five booklets, which were published with the name *Kantele taikka, Suomen kansan sekä vanhoja että nykysempiä runoja ja lauluja 1828-31* (Kantele, the ancient and modern poems and songs of Finnish nation).⁴¹ Poems were combined under the same subject to create a real poetic value in more unified and easily readable way. Although the fifth booklet never saw the light because of lack of funds, those literary works were followed by a series of three books which compose stories based on characters from folk poetry. This publication

³⁹ Järvinen 2010. Pp.66-67. “Elias Lönnrot’s Kalevala: a work of synthesis”.

⁴⁰ Lönnrot 2009. vol.1. P.427. “The outline of Kalevala” by Koizumi, Tamotsu.

⁴¹ Lönnrot 2009. vol.1. P.427. “The outline of Kalevala” by Koizumi, Tamotsu.

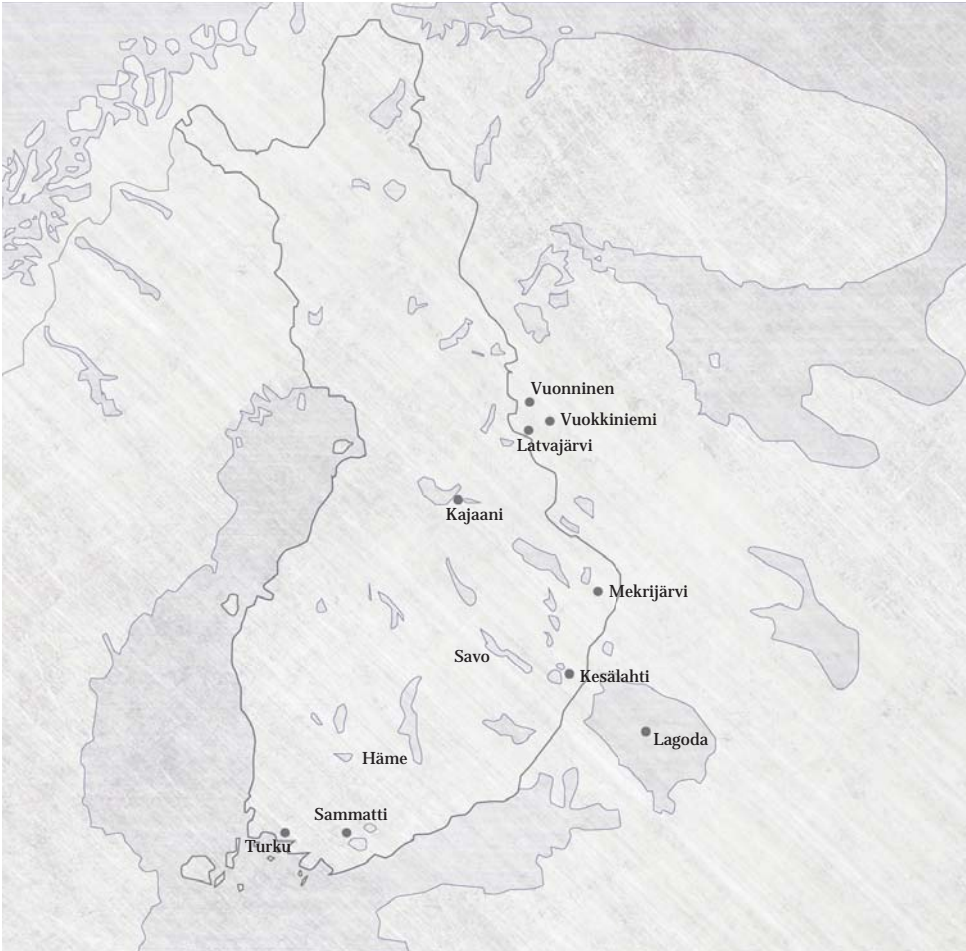


Figure 2.2. Places of poem collection. The main style in folk poetry was charms and spells in the west area (Häme, Savo), lyric poetry in south Karelia, and epic poetry in east and north Karelia, Archangel Karelia. Archangel Karelia was especially a great repository of folk poetry.

⁴² Järvinen 2010. P.69. “Elias Lönnrot’s Kalevala: a work of synthesis”

⁴³ Järvinen 2010. P.69. “Elias Lönnrot’s Kalevala: a work of synthesis”

⁴⁴ Lönnrot 2009. vol.1. Pp. 427-428. “The outline of Kalevala” by Koizumi, Tamotsu

⁴⁵ Lönnrot 2009 vol.1. P.428. “The outline of Kalevala” by Koizumi, Tamotsu. Alku-Kalevala is composed by 16 poems 5,052 lines.

⁴⁶ Lönnrot 2009 vol.1. P.428. “The outline of Kalevala” by Koizumi, Tamotsu. Vanha Kalevala is composed by 32 poems 12,078 lines based on 40,000 lines of poems and charms. Around 17,500 lines were collected in Archangel Karelia (currently a part of Russia), the other same amount was from Finnish north Karelia, Ostrobothnia and Savo, and the rest 5,000 lines were based on lyrical poems.

⁴⁷ Järvinen 2010. Pp.69-73. “Elias Lönnrot’s Kalevala: a work of synthesis”

adopted epic-style and includes lots of basic elements of the Kalevala.⁴²

Encounters with great singers and accomplishment of Kalevala

In 1831, the Finnish Literature Society was founded with Lönnrot as a first secretary. The participation to the society brought him some financial but more moral support for poetry collections.⁴³ After two abortive journeys in 1831 and 1832, he moved his base to Kajaani, near Archangel Karelia, a utopia of oral tradition. There, Lönnrot met the most significant singers and wrote down numerous texts of folklore.⁴⁴

In 1833, Lönnrot made a fruitful trip to Vuokkiniemi in Archangel Karelia, in which he met a great singer, O. Vanninen. The great accomplishment from the trip was soon organised into one book, *Runokokous Väinämöisestä* (the collection of folk poetry of Väinämöinen) with short stories from his previous publication. This is the so-cold *Alku-kalevala* (the original Kalevala), yet it stayed unpublished.⁴⁵

Lönnrot set off to Vuokkiniemi again as the fifth collection trip in the next year and succeeded to meet two best singers, Arppa Perttunen of Latvajärvi and Vassila Kieleväinen of Vuonninen. Thanks to those proficient singers, Alku-Kalevala was revised and was published in a name *Kalevalan taikka vanhoja Karjalan runoja Suomen kansan muinosista ajoista* (Kalevala, the ancient folk poetry of Karelia from the ancient Finnish nation) on February 28th in 1835. This is widely known as *Vanha Kalevala* (the old Kalevala), and the day of its publication is now celebrated as Kalevalan Päivä (Kalevala day), as a day of Finnish culture.⁴⁶

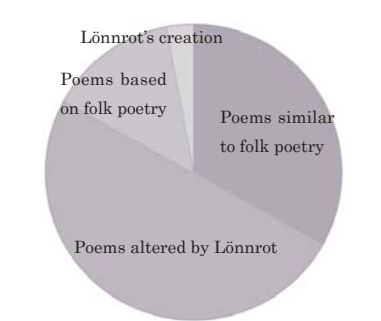
Although Lönnrot achieved success to bring almost double amount of poems into Vanha Kalevala from Alku-Kalevala, he did never stop his interminable journey on account of desire to preserve folk poetry in accessible way for the reading audiences with a real poetic value⁴⁷. After he published a collection of lyric and narrative poetry, *the Kanteletar taikka Suomen kansan vanhoja lauluja ja virsiä* (the Kanteletar, the ancient songs and hymns of Finnish nation) in 1840, Lönnrot started to cooperating with Daniel Europaeus for further investigation. Europaeus’ participation brought huge progress on collection of folk poetry. He met Simana Sissonen during his journey in Mekrijärvi in north Karelia,



Figure 2.3. Kalevala-play by pupils in Luopajärvi.

⁴⁸ Lönnrot 2009 vol.1. P.428-429. “The outline of Kalevala” by Koizumi, Tamotsu. Uusi Kalevala is composed by 50 poems 22,795 lines.

⁴⁹ Lönnrot 2009 vol.1. P.430



⁵⁰ Järvinen 2010. P.73. “Elias Lönnrot’s Kalevala: a work of synthesis”. Kalevala contents 33% of poems which are similar to folk poetry, 50% of whose orthography, language or metre were changed by Lönnrot, 14% of lines not found in folk poetry but based on them, and 3% of Lönnrot’s creation.

⁵¹ Järvinen 2010. P.67. “Elias Lönnrot’s Kalevala: a work of synthesis”

⁵² Järvinen 2010. P.80. “Kalevala-metre folk poetry and its context”

in addition he collected numerous poems in Lagoda Karelia and Ingria. With those poems and investigation of folklore, *Uusi Kalevala* (new Kalevala) was released in 1849, which is now famous with a name *Kalevala*.⁴⁸

Later, in 1862, the shorter version of Kalevala was published for schools to spread the Finnish folklore toward children under an introduced basic education system, and in 1862, Lönnrot published *Suomen kansan muinaisia loitsurunoja 1880* (the ancient folk spells of Finnish nation) as his last publication on folk poetry.⁴⁹

Compilation and creation in the Kalevala

As opposed to Vanha Kalevala which is tied stronger to Karelian folk poetry, Uusi Kalevala, currently known as the Kalevala, is considered to be a literary epic as a consequence of compilation and creation by Lönnrot. Through the analysis of collected poems, he categorised them under common conceptions, which plainly build the base of an imaginative storyline of the Kalevala. When arranging the folk poetry into one book, Lönnrot added own creativity in order to support the entire structure⁵⁰.

Although his creativity composes only three percent of the whole epic, it is sometimes considered a huge matter on investigation of Finnish ancient folklore in ethnological research. However, in architectural point of view, this issue is not a serious consideration to understand Finnish ancient folk conception. The principal point is that Kalevala was organised under enormous amount of folk poetry from various genres from various places. In fact, it is based on more than 3,500 texts on varied notions transmitted from great singers to Lönnrot during his song-collecting journeys⁵¹. The original songs were sung by ancient Finns with Kantele in their every daily scenes. Some tell the epic stories, some lyrically express feelings, some were recited for a magical purpose and some were for rituals⁵². From this wide range of types of poetry, Kalevala tells the readers not only Finnish indigenous notions and culture in every respects but also sensibility of the ancient Finnish. Even though it includes some creations by the author himself, it would be exceedingly interesting as an object of expression of Finnish authenticity. Therefore, despite the other version of Kalevala and the related publications, Uusi Kalevala, now widely know as Kalevala, will be focused on to be analysed towards the designing phase in this thesis.

2-2. Contents

Poem 1 The origin of the world and Väinämöinen's birth

Poem 2 Sowing and the beginning of growth

Poem 3 Joukahainen and Väinämöinen's spell match

Poem 4 Fate and death of Maiden Aino

Poem 5 Väinämöinen's lamentation and Aino-fishing

Poem 6 Joukahainen's revenge on Väinämöinen

Poem 7 Väinämöinen in Pohjola

Poem 8 Maiden of Pohjola and a wound in Väinämöinen's knee

Poem 9 Origin of iron and recovery from a wound

Poem 10 Forging of the Sampo by Ilmarinen

Poem 11 Lemminkäinen in Saari

Poem 12 Lemminkäinen's journey to Pohjola

Poem 13 Lemminkainen's courting and the first task: a deer hunt in Hiisi

Poem 14 Two more tasks: a horse deer hunt in Hiisi and a swan hunt in Tuoni, and Lemminkäinen's death

Poem 15 Lemminkainen's resurrection by his mother

Poem 16 Väinämöinen's Boat-building and a visit to Tuonela for lost spells

Poem 17 A visit into Vipunen and acquisition of lost spells

Poem 18 Wooing rivalry of Väinämöinen and Ilmarinen

Poem 19 Tasks on Ilmarinen and a marriage contract

Poem 20 The wedding preparations

Poem 21 The wedding at Pohjola

Poem 22 The bride's grief

Poem 23 The moralization of the bride

Poem 24 The moralization of the bridegroom and the Bride's Farewell

Poem 25 The wedding at the bridegroom's home and the Väinämöinen's second visit to Tuonela

Poem 26 Lemminkäinen's second journey to Pohjola

Poem 27 The uninvited guest and death of the master of Pohjola

Poem 28 Lemminkäinen's escape from Pohjola

Poem 29 Refuge into a small isle

Poem 30 The frost-curse

Poem 31 Kullervo in Untamola

Poem 32 Kullervo as a shepherd

Poem 33 A curse by Kullervo and death of Ilmarinen's wife

Poem 34 Discovery of Kullervo's tribe-folk

Poem 35 Kullervo's seduction of his sister

Poem 36 Kullervo's revenge and death

Poem 37 Forging of the golden maiden by Ilmarinen

Poem 38 Ilmarinen's second wooing at Pohjola

Poem 39 Set-out to Pohjola to take back the Sampo

Poem 40 Giant pike and the birth of kantele

Poem 41 Väinämöinen's sweet notes of the kantele

Poem 42 Capture of the Sampo and a counter-attack by Louhi

Poem 43 The struggle for the Sampo and its destruction

Poem 44 Birth of the second kantele

Poem 45 Louhi's first revenge: diseases

Poem 46 Louhi's second revenge: bear

Poem 47 Louhi's third revenge: the confinement of the sun and the moon

Poem 48 Capture of fire

Poem 49 Restoration of the sun and the moon

Poem 50 Marjatta's son and Väinämöinen's departure

Kalevala as a Finnish national epic

2-3. Key themes



Figure 2.4. Terho Sakki “Ensimmäinen runo / Kalevala-muistomerkki”. 1969-73.
In the front garden of Kalevan kirkko in Tampere.

The Kalevala has widely prevailed as a national epic of Finland, thereby it projects how ancient Finnish sees the world. Throughout fifty poems, great variety of worldviews are found. This section will pick up some essential themes to analyse the core of vernacular notions, especially focusing on the vital keys for following spatial expression.

The Creation

A beauteous Goldeneye flies upon the water, seeking herself a place for nesting, and lands on a knee of the Air Maiden Ilmatar, who descends from the heaven to the water. The bird builds a humble dwelling there to lay her eggs, which later drop into the deep bottom of the ocean to transform in marvellous beauty. The lower half of the egg grows to be the nether ground and the upper half to be the upper heaven. The white part transforms to the moonbeams, the yellow part to the sunshine, the motley part to the starlight, and the dark part to the cloud. Years has passed prior to the commencement of the creation by the maiden Ilmatar. She drift her body throughout the mighty ocean to create the earth; fertile hillocks; holes for fishes; many deeps of ocean; level banks; wide bays and inlets; rocks; and hidden reefs.⁵³ This is how the world begins according to the mythology.

There are similar yet varied legends on the Creation, taken over in Finland⁵⁴. One of the folk poems shows another character to support the seabird’s nesting, or another shows different name on the maiden. Nevertheless, common essential features in those myth are the incubation of the bird’s eggs and the ocean. In actual fact, influences from this motif are shown in several parts in the Kalevala⁵⁵.

“*Jumalall’ on ilman viitta, Luojalla avaimet onnen, Ei katehen kainalossa, Vihansuovan sormen päässä* (God has power of sky, Creator has a key of fortune, Not under the arm of shamans, Not on the fingers of a wicked man).”⁵⁶ The Creation is fundamentally the beginning of the world and the origin of all fates. Essence of the nature, one of the most important keys of the Kalevala, simultaneously arrives from here. Furthermore, the main heroic character Väinämöinen is born from Ilmatar in the same poem. Hence, comprehension of the Finnish indigenous notion of the Creation is undoubtedly the very first step to read the Kalevala conceptions.

⁵³ Poem 1.

⁵⁴ Järvinen 2010. P.36. “*Ilmatar*”.

⁵⁵ Lönnrot 2009. For examples, in poem 19, in one of the tasks imposed to Ilmarinen for a marriage contract or in poem 41, when a bird collects tears of Väinämöinen.

⁵⁶ Poem 43, Line 337-430. Translated by Maitani. From Väinämöinen’s words. It is conceived to be referred from a proverb, according to Tamotsu Koizumi (Lönnrot 2009. Vol.2. P.400.)

Firmament

Throughout the Kalevala, the heaven is considered the world of God. Ilmatar, the Goddess of the Creation, descends from the firmament so as to build the world, therefore it is a place of origin of all phenomena. As planetary symbols, sun, moon and stars often appears in mythology: shamans pray for the spheres and people asked them for directions of life. Especially the sun is treated as a hallowed symbol which always enshrines above the sky to know all the things happens in the world. Thus, astronomic elements is genuinely consecrated as divine metaphor.

When considering the traditional notion of the firmament, the most essential thing is mythology of Maailmanpylväs, the great pillar connecting heaven and earth. In the Kalevala, “*Pillars of the sky were planted*”⁵⁷ at the same time with the birth of field, forest, islands and rocks. The hallowed erection of the pole is a fundamental part of the Creation. In folklore from Lapland, the Pole Star is actually conceived a pillar of the heaven. In addition, mythology tells ancient Finnish conceptions of layers of the sky. One folklore tells a story that Gods of sun and moon weave diversified veils using the sunlight as grain, and spread it toward the earth⁵⁸. Some tells more clear images of nine layers above the earth while another tribe believe the seven of them⁵⁹. Although there are varied theories transmitted about the firmament layers, this vernacular idea plays a key role in legends, as it frequently appears in the Kalevala story. Moreover, the sky opens its “window” in some poems. Those expressions explicitly demonstrates traditional views that the ancient Finnish people have believed the existence of the sort of roof between heaven and earth, between God and human, yet connected with pillars.

One unique feature of the firmament in the Kalevala is that giant trees reaches to the heaven. Shamans occasionally sing incantations to grow fir trees in order to hung the Plough on it or in order to climb up toward the sky. When sun and moon have lost, they desperately try to recover them by putting the imitations on trees⁶⁰. These mythic stories conceivably shows inner desire to reach to the hollow world or the idea that heaven is conceived something holly yet tightly connected to human life beyond the natural elements. By contrast, when considering a fact that all the characters who climb up giant trees are thought to be metaphors of the Gods, such as Ilmarinen who forged the heaven, epics might modestly underline the holiness of the firmament.

Religion and God

“*Lönnrot erased Christian features*”⁶¹, Irma-Riitta Järvinen states in her book *Kalevala Guide*. Although obvious Christian elements remain in an epic about Marjatta and her son who later becomes the King of Karelia⁶², many of saints’ names or the word God were replaced by him. Lönnrot desired to construct the world of the old Finland before the arrival of Christianity. Based on his own belief, the primordial Finnish religion had been monotheistic and later developed a polytheistic religion, retaining one chief god, Ukko, the god of the weather.⁶³

In the Kalevala, several gods as natural spirits appear, such as the forest spirit Tapio and the water spirit Ahti, and they have their own families as we human beings do. Same idea is similarly seen for the astronomic spirits: they are also conceived to live with family upon the sky. Contrary to this, some of the main heroic characters, Väinämöinen and Ilmarinen, are depicted as human, nevertheless they are said to be metaphors of Gods. Thus, glimpse of humanity is seen in spiritual elements while some gods are described as human. Some epics represent old folklores to make formal contract with natural soul, related to human intervention to their place. Those features modestly reveals the religious conception of nature and spirits, that is, as human life goes along the nature with tight connection, so human lives simultaneously with its spirits and gods, close enough yet untouched.

Rituals and daily life

Original sources of the Kalevala is dearly wide-ranged: poems of daily life, spells for religious rituals, chants by shamans, and songs of legendary stories. Therefore, ceremonial occasions and their ordinal lifestyle occasionally appear at key points among the narrative scenes.

The most outstanding and profoundly-treated ritual is wedding. Six-poem-length story telling essential features of Karelian tradition and indigenous though on cerebation of forming a new family⁶⁴, starting from bride’s home and then transferred to bridegroom’s house. Bride is conceived to be erased from her own family to join the new, and then at the new home, firstly she has to be accepted by the spirits of the house. Bridegroom, as well as bride, ritually take instructive speeches from elders as spells, which had been sung in actual weddings in old Karelia. Religious convention and traditions have been demon-

⁵⁷ Poem 1. Line 283.

⁵⁸ Lönnrot 2009. Vol.1. P.417.

⁵⁹ Lönnrot 2009. Vol.2. Pp.403-404.

⁶⁰ Poem 49.

⁶¹ Järvinen 2010. P.59. “*Religion*”.

⁶² Poem 50.

⁶³ Järvinen 2010. P.59. “*Religion*”.

⁶⁴ Poems 20-25.



Figure 2.5. Old buildings in Miihkala.

⁶⁵ Järvinen 2010. Pp.63-64. "Wedding".

⁶⁶ Poem 1.

⁶⁷ Poem 50.

⁶⁸ Poem 45.

⁶⁹ Järvinen 2010. Pp.43-44. "Tuoni, Tuonela".

⁷⁰ Poem 16.

strated during the whole process of ceremony. Since Lönnrot wanted to provide a vivid image of old Finnish culture, he devoted enough amount of lines for wedding poems to represent Karelian rituals, chiefly the customs in Archangel Karelia⁶⁵.

Simultaneously, for purpose of representation of old Finnish culture, and as a result of folklore arose from the locals, clear pictures of ancient daily life are vividly described throughout the Kalevala. Employment of fire provides the idea of how old Finns treat it courteously and sometimes fearfully. In the stories related to conflicts, relics of Viking era are found. In addition, some architectural features are also seen throughout entire epic; traditional wall construction filled with moss; benches nearby windows; pots hung above the oven near the door; the old man on the oven; and lots about sauna. Because of those genuine images of old life, the mythology becomes more alive in the story. Thus, the Kalevala has succeeded to take over indigenous tradition as well as folk poetry.

Life and death

The air virgin Ilmatar becomes pregnant from the wind of the ocean⁶⁶ and Marjatta, mother of King of Kalevala, from a lingonberry⁶⁷. Nine infants, origin of evil illness, are born, deriving the wind⁶⁸. Similarly, a maiden Aino throws herself into the sea for suicide and end up in transforming to a fish. Thus, natural motif in birth and death is referred in many part in the Kalevala. Especially impregnation from nature is one of the common themes in various mythology in any regions.

Death, or the end of life, more frequently appears throughout the Kalevala in a variety of ways; suicide; murder; slaughter; and any others. They, at the end, arrive at Tuonela, sometimes called Manala, the land of the dead. It is believed to be divided from this world by Tuonela river, whose ferry-maiden or a swan often referred to as a motif of the world of death in art. Finnish native world-view contains a primitive notion that the dead keeps on analogous life to the one in the world of living, yet in cold and uninviting mood⁶⁹. As evidence of it, in Väinämöinen's Tuonela visit, his falsehoods about his death are easily pierced by a maiden of Tuonela, because of his appearance never showing any imprints of it⁷⁰.



Figure 2.6. Vertti Teräs vuori, “Tuonelan tyttö”. 1997.

⁷¹ Poem 16.

⁷² Lönnrot 2009. Vol.1. Pp.484-485.

⁷³ Järvinen 2010. Pp.51-52. “Feelings”.

⁷⁴ Järvinen 2010. Pp.51-52. “Feelings”.

⁷⁵ Poem 8.

⁷⁶ Poems 20-25.

⁷⁷ Poems 30-36.

Tuonela is occasionally appears in several part in the epic as a dark cursed place, yet some characters successfully survives from there. Väinämöinen, the eternal sage, visits the place to collect the lost spells and eventually comes back to home by transforming himself into animals⁷¹. The stories about Tuonela narratively reveals the shamanism of Finland. Folk legends state that ancient shamans dispensed an initiation to come and go between this world and the underworld for further profound wisdom. They are believed to have transformed into animals in order to survive evil hindrances on their resurrection⁷². Thus death for ancient Finns is interpreted to have been a tough hurdle to get over but also a vital key for deeper comprehension of the life.

Humanity

The epic of the Kalevala portrays all kind of emotions in any scale; envy; rage; anger; shame; sorrow; jealousy; inspiration; erotic desire; and love⁷³. Passionate emotion impetuously provoke characters, at times into audacious deeds resulting in conflicts, at times into vital assistance with infinite devotion. Lönnrot incorporated more feeling into the Kalevala, in contrast to the original epic poetry⁷⁴. The reason is not unveiled, however it is possibly declared that this emotional narration supplements original feelings from lyric poems performed by skilled singers.

Human behaviour and passionate emotion is often followed by instructive consequences. Väinämöinen damns himself because of his haughty pride⁷⁵ and Lemminkäinen, whose reckless emotional deeds always involving his mother into trouble, lets himself face to the misfortunes invariably at the end. In the wedding rituals, the elderly gives vital instructions of married life to the bride in her sorrow as well as to the bridegroom⁷⁶. The most notable section in an instructive aspect is definitely the Kullervo poem. A miraculously strong boy, grown up without being loved by his own family and anybody, lives his whole life to revenge the people who had ruined his life. His fully-hatred life instructs a vicious spiral of hate and importance of education of children⁷⁷.

In the Kalevala poems, human deeds and emotional feelings move the world. Strong envy affects the relation between tribes to incur fights while calm feelings establish friendly relations between each other. Powerful human desire derives ruin of the nature while great awe for it revives it. Humanity thus adds vivid

picture to the story and effectively emphasises the instructive notions, which ancient Finns had desired to take over to following generations in song. Here, in humanity, Finnish primitive ethics is potentially revealed.

Pohjola

Pohjola is a cold and gloomy hinterland led by Louhi, the mistress of the land. Despite its unwelcoming atmosphere, Kalevala people irresistibly visit to Pohjola because of a beautiful daughter of Louhi and the wealth-bringing Sampo. Analysing the location of Pohjola, many folklorist built their individual theories on it. Since it exists faraway north, some mentioned that it hints Lapland while other emphasised that it should locate somewhere beyond the sea. Another interpreted that it is metaphorical image of Tuonela, the world of death, because of this ominous and unpleasant air and existence of a rapids on the way from Kalevala⁷⁸.

Pohjola is mostly presented as contrastive image to Kalevala. This gloomy north hinterland, a place of illness and misfortune led by powerful mistress, modestly suggests old incantation culture: the more going to the north, the more spells were prosperous⁷⁹. Another noteworthy thing is that sun and moon is confined in Pohjoa with a magic chanted by Louhi. It is somewhat interpreted to be a metaphor of the midnight sun and the polar nights in north Finland, or possibly just to be a solar and lunar eclipse. Thus, Pohjola is possibly understood in various ways, so that the interpretation of the Kalevala world varies for each person, hinging upon how and where they see Pohjola.

Sampo

Sampo is a wealth-bringing mill, forged by smith Ilmairinen. He is said to be the one who had created the firmament before, which emphasises the value of it. This symbol of wealth is indeed one of the most essential motifs in the Kalevala, causing lots of frequent struggles and jealousy because of its wealth. Flour mill, salt mill and money mill create everything people need; things to eat; things to sell; and things to store at home. When having been broken into the ocean after a severe conflict for depriving this magical mill, even pieces makes the sea rich⁸⁰.

⁸¹ Järvinen 2010. Pp.60-61. “*Sampo*”.

⁸² Poem 40.

⁸³ Poem 44.

⁸⁴ Lönnrot 2009. Vol.2. P.429.

⁸⁵ Järvinen 2010. Pp.55-56. “*Kantele*”.

Among plenty of varied theory on it, one analysis states that the name Sampo is related to the word “sammas”, which means a pole or a statue⁸¹. Conceivably, it is a metaphorical expression of Maailmanpylväs, a conception of a great pillar supporting the firmament layers, consistent with the old legend that it is forged by whom has built the firmament. In addition, in poems of the Kalevala, its three roots are put down beneath the mountain, the sea whirl and the mountain-dwelling for each. Namely, wealth has been conceived to bring from the earth and to grow toward the heaven, on the evidence of the historical fact that Sampo poetry had been sung for sowing in the old times.

Kantele

When Väinömainen plays kantele, an instrument with strings, its melody genuinely attracts everything on the earth; people; animals; trees; fishes; things in the forest; things in the water; things in the sky; natural spirits; and even cosmic inhabitants. In the Kalevala, kantele thus bodies the eternal happiness and peace. While it is traditionally made of wood, two different versions appears in individual poems; one made of the jaw of a giant pike⁸², and another built with a birch tree⁸³. The first pike-jaw-made kantele, an achievement of the conquest of a natural monster, is regarded to be a figurative motif of its authority, used to be a magical instrument in religious rituals⁸⁴.

Not only as a narrative motif, kantele is an indispensable instrument for rune-singing. Great singers performed the kantele when transmitting folk poetry. Among varied styles with different numbers of strings, the five-string version had been generally utilised, relating to the pentatonic nature of ancient Finnish poem-singing⁸⁵. Kantele was primarily played for improvisation of continuous melody by soloists, letting strings sound and never stopping them until the next time they touch. The melodic eternity profoundly enriches the mythology as an essential element both in the story and in rune-singing, as a magical tool for incantations and as a national instrument of Finland.

Nature

Only subject invariably appears throughout the world of the Kalevala is nature. This is indeed the most vital element when understanding the mythology. Nature is regarded in a variety of ways. Illness, born as human children, are

⁷⁸ Lönnrot 2009. Vol.2. Pp.461-462.

⁷⁹ Lönnrot 2009. Vol.2. P.400.

⁸⁰ Poem 43.



Figure 2.7. A bear is waiting for visitors at the entrance of National Museum of Finland. (2015)

sealed into the wildness. When sun and moon were confined by Louhi, Kalevala people try to revive them by utilising natural objects. Bear, conceivably the most referred animal, reveals its sublime position among any other natural beings. Nature and human interact each other either in good and bad manner. Wildness occasionally gives human essential advices to direct them to the right direction as well as is sent by evils to interfere people. One unique point is that nature speaks. Trees, animals, spirits, fishes, rock, all the elements lives in the same way that human does. Even spirits of natural phenomena spend the life with their own families. The communication between human and environment vividly shows the primitive Finnish notion of the nature, that is to say, nature is not something controls nor be controlled, but something live along in proper distance, sometimes friendly, sometimes threateningly.

Discussing the nature, mysterious existence of Antero Vipunen, a long-dead giant sage, is definitely indispensable. When Väinämöinen visited him for the magic words, the deathly giant swallows him. He hummers inside the stomach, that consequently awakes the giants. Väinämöinen thus survives from the internal journey of Vipunen with incantations as its accomplishments⁸⁶. This macabre poem is often referred to as shaman's trance to enter the other world to obtain knowledge from the dead. Primarily, to spell singers, the profound comprehension of the object was crucial skill. They required to know the origin and backgrounds of all phenomena for further power.⁸⁷ In other words, deep knowledge of natural phenomena grasps a key of human fate in old culture. The human world commence from the cutting of huge oak tree, following the world creation. By felling the tree covering the entire earth, human beings begin their life. Similarly, shaman's knowledge-seeking is to control the object by abuse at its origin. In contrast to pictures of humanised nature, the shamanistic shadow bodies the lusty desire for humanism.

⁸⁶ Poem 17.

⁸⁷ Lönnrot 2009. Vol.1. P.402.

Kalevala as a Finnish national epic

2-4. Spatial sense of Finland



Figure 2.8. Lake in Tampere (2015).

By analysing the key themes, essences of Finnish spatial notions are represented; perspectives on this side and another, on spatial depth, on distance, on continuity of space, and on intimacy of time and space. Here reveals the vernacular spatial sense arose from the folk world view of Finland, that is special focus in the following design phase.

Water

The Kalevala poems portray water in various ways; as a river; as a river; or as the ocean. In the very beginning of epic, the creation of the world, incubation of Goldeneye's eggs takes place in the ocean. On the other hand, the great sage Väinämöinen sails the ocean by a boat for his last journey toward where he rests. Throwing oneself into the water is one of the major means of ending the life. In addition, to women, drawing water from the lake is one of the main tasks of life, for daily use and for sauna. Thus, water symbolises the entire process of life, from birth to death, as a means of wealth, or sometimes as a source of disaster.

This intimacy to the water enriches the sense of spatiality on it. Water is frequently treated as a boundary of places, as a turning point of their coming fates. Tuonela, the world of the dead, is believed to exist on the other side of Tuonela a river, similarly to a great whirling current of the ocean regarded as the entrance of another world. Adventurous journeys to the north hinterland Pohjola is often obstructed by river or ocean. To the ancient people, water is conceivably a thing to divide not only the land itself but also tribes, life, culture, and the living and the dead.

Finland was born under the water after ice age ends, reminds the creation of the world in the Kalevala. Finland is a country of lake, therefore water indeed deeply relates to their life in any aspects. Although another natural symbol, forest, similarly divides place, people sees a boundaries in water more distinctly because of its obvious physical cutoff. To the people, especially the ancients, crossing the water is always dangerous and adventurous. However, old Finns knew that there is a land on the opposite side of the water as Finnish lakes and seas are inland, unlike the huge ocean itself surrounding continents. They knew that they can reach the destination by going along the shore without entering the water. Only exception is Tuonela, the world of death, completely separated from this world.

Value of water is often emphasized in myths, not only in Finland but also in any others. However Finnish interpretation of spatiality in it is comparatively unique. Water symbolizes both beginning and end, wealth and misfortunes, and division and continuity. Hence, water is one of the Finnish identities, peculiarly building original sense of space.

Depth of space

In spells, a honeybee flies for the nectar over nine skies, over nine seas⁸⁸. Lemminkäinen's song reaches beyond six villages, over seven seas⁸⁹. Mythology of Maailmanpylväs transmits varied legends on firmament, yet all includes the idea of multiple skies. Thus, spatial remoteness is often portrayed with layers of natural elements. As the Kalevala stories take place over several places, description of distance is one key to read the context. The more people go over spatial layers, the further they makes their way. Description of layers is an interpretative metaphor of depth of space.

This expressive tendency conceivably suggests the spatial idea, that is, the space contains several parts. In the other words, individual parts compose the whole. Therefore physical progression always requires the crossing of multiple levels of place, both vertically and horizontally. The ancients might have lived in the invisible layers of space, which their body go through along their move.

Continuity of the worlds

Chequered journeys between places is greatly impressive pictures throughout the Kalevala. Characters make adventurous trips not only to other lands but also to the other worlds. Some of them reach to the firmament, the world of Gods, by climbing up the giant trees growing towards the heaven, while sparks of the sun drops from there through the layers of sky. On the other hand, some visits the world of the dead beyond the river, and successfully revive from there. The noteworthy is that descriptions of those scenes projects only faint image of the boundary between different worlds. Although there are plenty of extraordinary difficulties on the trips especially to Tuonela, those places are still pictured as the place people can reach. They travels beyond the sphere of human.

⁸⁸ Poem 15. Line 424, 476.

⁸⁹ Poem 42. Line 291-292.

The mythic story is set in the whole universe including the another worlds without remaining in the human level. The Divines above the sky and the underworld evil gods are represented as if they are human. As human lives ordinal life with their family, so do the gods. Either physically and culturally, the life in the other worlds displays similarity and intimacy to that of the human world.

Furthermore, nature again plays essential keys in this aspect. The giant trees put their head in the heaven so as to let people reach to the firmament. Tuonela river divides the worlds of livings and the dead. The similar feature is seen in the conception on the water, which separates the land, yet brings people to the other side. The initial view of the distance between different worlds perhaps arise from the same theory as water. The worlds of human, gods and the dead are thus divided with any factors, yet they are indeed exists in the continuity of space in the ancients' perspective.

Time and space

As lyrical poems arose from ancient songs, the Kalevala contains a great deal of metaphor. Among a wide range of depiction, an interesting thing is usage of time. Process of time is often applied to spatial description. A honeybee flies, the first day near the Moon in heaven, the second day on the shoulders of Otava, and the third day upon the head of seven starlets⁹⁰. Väinämöinen steers one day along the sea-shore, the next through shallow waters, and the third day through the rivers⁹¹. Kullervo walks for three days towards north-east, and Lemminkäinen reaches his destination after three-month sailing. Thus distance and time is tightly connected in the Kalevala.

No research was found to surely say if it is just a poetic depiction to deepen the narrative, or if it originates in the old notion of time and distance. However at least regarding to the Kalevala itself, this expressive tendency is very interesting and should not be ignored. Through the epic, we see the spatiality in time, simultaneously we see time in space. Namely, space is considered a thing that never be separated from time and time always including spatial depth in it.

⁹⁰ Poem 15. Line 497-502.

⁹¹ Poem 40. Line 14-16.

As it is mentioned in the introduction, the Kalevala originates in the folk poetry transmitted over generations in Finland, simultaneously it includes certain amount of creations by the author Lönnrot. This fact accordingly makes the interpretation difficult. Readers cannot be sure if a poetic depiction projects the vernacular notion of the ancients, if a metaphor is applied to enrich the original song, or if the narrative scenes were added by Lönnrot during compilation process.

This ambiguity sometimes considered negatively in ethnological research, however it brings interesting phenomena on expression. It results in surprisingly wide variety of expressive outcomes from various interpretations; some find the historical value on it while others focus on more poetic atmosphere. Analysis here also gives valuable encounters to the unique spatiality, both in a national epic Kalevala and in the vernacular thought behind it. The Kalevala portrays historical, religious and artistic features, which naturally interact throughout the epic to create unique world of the mythology. Hence, key themes and spatiality construed here is vital conceptions of Finnish authenticity, moreover, is indeed the pure worldview of the Kalevala itself.

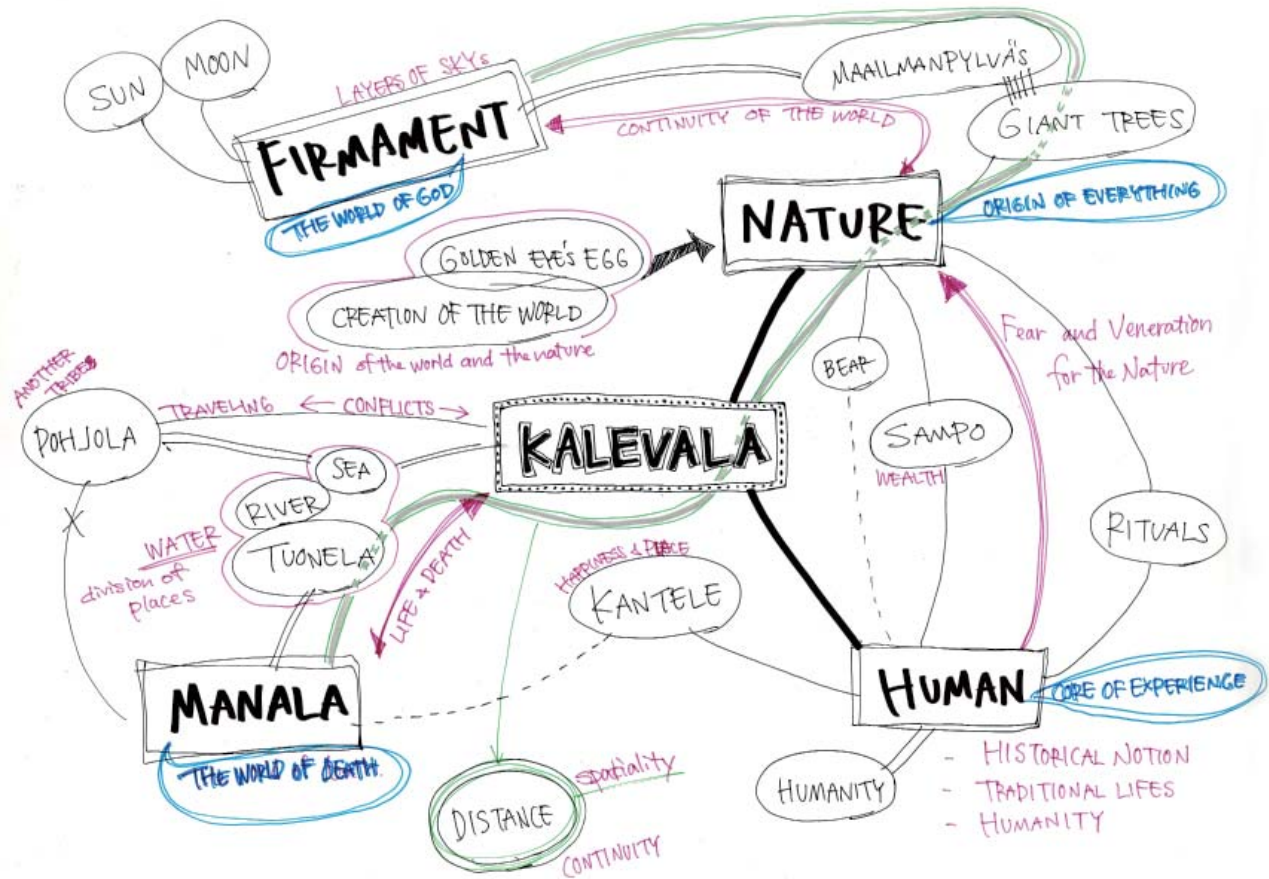


Figure 2.9. Interpretation of the Kalevala.

Chapter 3. Mythology in Expression

From oral tradition to expression

3-1. Linguistic Perception

The relation between body and space is one of essential points concerning about architectural expression to be perceived. It is, if anything, related to the process of experience for whom receives it. Then what is the key on the process of design? The next focus is in the origination of it, especially concerns linguistic expressions and spatiality in literary works since the following sections treat the Kalevala.

As it is widely known, as well as it is studied in detail in a previous chapter, The Kalevala is the national epic of Finland, compiled based on folk poetry, spells and songs. The most important in expression of myth and epics is, above all, words. To begin with, the meaning of verbal expression is to be considered. It is generally said that there are approximately three to eight thousands of languages in the world⁹²; some are widely used and some are dying. This large number of languages are typically deep-rooted on the land. They arose from culture and folk life of the land, therefore languages show their original views of the world.

This is evident in the case of words for ‘snow’. English vocabulary is limited in only few terms in United States since snow is only part of the weather for the most of them. By contrast, Eskimo has various words even some of them live in the same country as many Americans. To Eskimos living in the north land, snow is not just the weather but an essential environmental feature so that it is required to distinguish it in different terms.⁹³ A similar trait is seen in Finnish language. For Finns who live in the harsh climate in long winter time, snow is one of the main factors composing their life, therefore they have variety of words synonymous with ‘snow.’ On the other hand, the weather plays an important role in terms of admiring the beauty of nature in Japan. Description of the modest differences of the weather has given a depth to representation in tradition.

Hence Japanese expression of snow is variety in plenty terms, although only a part of the country is covered with snow during winter.

Language furthermore shows differences on cultural concepts of space. For instance, there is no word corresponds to ‘privacy’ in Japan. “*Yet one cannot say that the concept of privacy does not exist among the Japanese but only that it is very different from the Western conception.*”⁹⁴ Hall’s analysis states the Japanese idea on private area, that they consider their house together with its surrounding zone as one structure and are against sharing a wall of their house, while they do not care having someone around them.⁹⁵ Or it is possibly because Japanese sees the space between the things while Westerns focus only on an object itself.

These above-mentioned cases clearly show how the native thoughts is connected to language. It even effects when one speaks architecture as it also strongly indicates the sense of space. Language is deeply related to the concept and view of the world of where it is spoken, therefore to give expressions in words is to give meanings through the cultural interpretation.

Words also represent one’s memory or own past experience. Information transmitted in it gives different perception from the real. For example, the impression received in words of ‘big’, ‘soft’ or ‘dark’ differs for each person, based on what one previously perceived in the past. The meaning of words are thus in individual remembrance⁹⁶. The fact is verbalised through one’s experience and knowledge of the past, and then is received similarly by the others. Present is understood through past.

In literary works, all the phenomena are represented by abundant words in order to draw a reader into the imaginary literal world. The linguistic expression is exceedingly fertile, therefore the meaning of the words sometimes expands far over sphere of one’s memory. In other words, literal words bring a reader from the real sensory world to the imaginary expressive world beyond his perceptual experience. In the case of the Kalevala, the Finnish wild nature, primitive humanity and anything around ancient Finns are expressed in poetic terms, therefore one gets the new view on them although it might be spontaneously transformed into different sense filtered by present linguistic interpretation of a reader. In literature, words are thus invitation to reach to the extraordinary view

⁹² The statistics are vague because of no precise standard to distinguish if they are established languages or regional dialects.

⁹³ Hall 1990. P.91.

⁹⁴ Hall 1990. P.152.

⁹⁵ Hall 1990. P.152. Hall made an analysis on Japanese concept of space based on a authored book of Donald Keene, *Living Japan*.

⁹⁶ Tokumaru 2009.

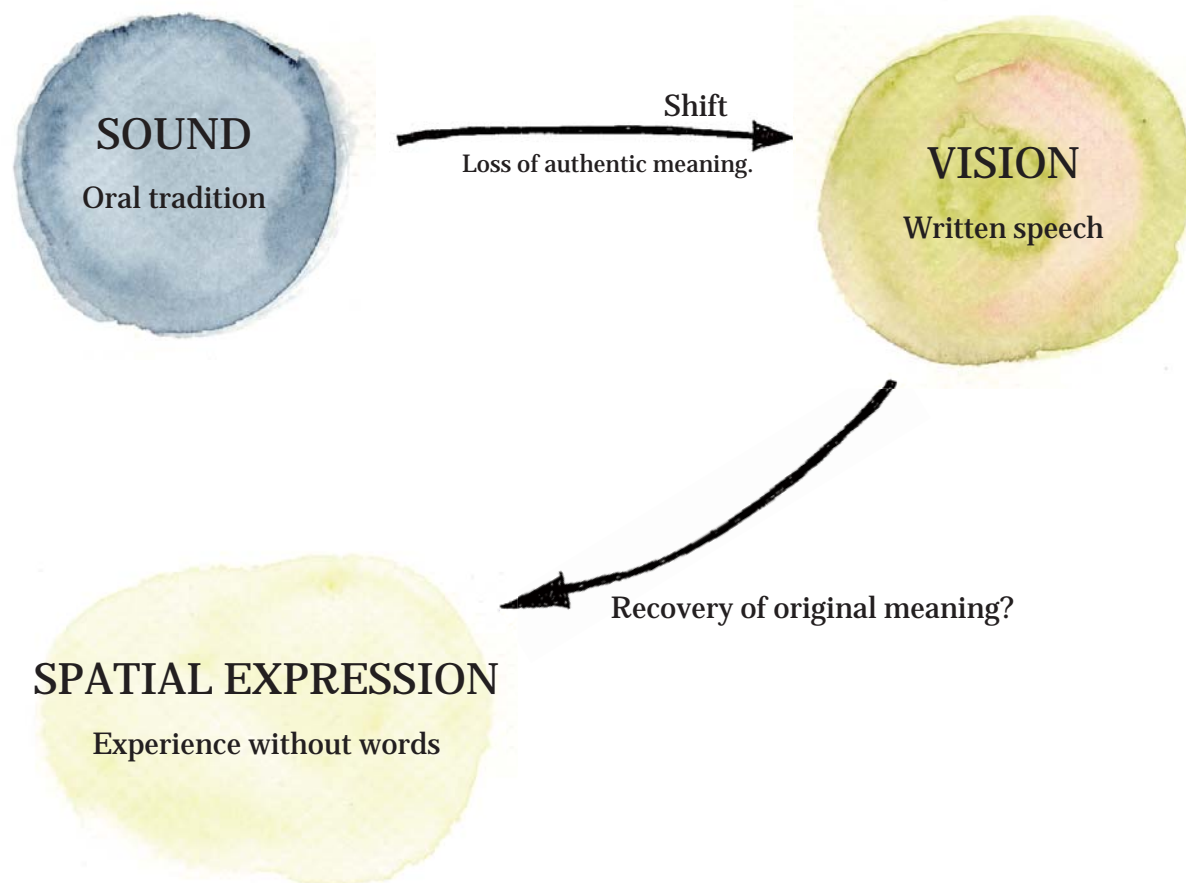


Figure 3.1. The meaning of the experiential expression in the perceptual shift from oral to written.

in which one can experience the pseudo perceptual world only with his imagination.

Similarly, words are frequently used in everyday life, however the role of it is slightly different from the ones in literature. Speech, as well as the written word, is one of the most general communicational ways of daily use, therefore to many people it is not the artistic expression but nothing other than usual conversation. While literature fully consists of words, ones of everyday life is only a part of the various tools of communication employed without special consciousness. Words unintentionally released from a man represent himself of the moment, consequently a mode of expression builds impression of the person. It occasionally goes out of the control after being released, as if it were another oneself.

Thus words are abundantly various. It is unintentionally carried out by whoever in daily life while it, in contrast, plays an artistic role in literature to lead the readers to the extraordinary world as any kind of art works do. These different aspects give the closeness and an artistic character in linguistic expression, so as to result in the extent and depth of it.

One consists of his own past differs from that of any others. As the man is peerless, so the meaning of words is. Moreover different languages causes in different interpretation. Expression in words is perceived over dual interpretation of when the words are released and when it is received, therefore the pure meaning of the initial thought varies from the original through the verbalising process; at times into the dispassionate view and at times into the extraordinary world beyond the imagination. Namely, one can see the world both from the view of who put into the words and from the view of himself through linguistic interpretation.

Another notable feature of linguistic expression is the different meanings between oral and written language. Walter J Ong points out in his book *Orality & Literacy*, that “the shift from oral to written speech was essentially a shift from sound to visual space”⁹⁷ and “(t)hough words are grounded in oral speech, writing tyrannically locks them into a visual field forever ... a literate person cannot fully recover a sense of what the word is to purely oral people.”⁹⁸ When a word as auditory sense shifted into visual information as a letter, the meaning of the word has greatly changed. In fact, one did not see first in the sixteen

⁹⁷ Pallasmaa 2005. P.24.

⁹⁸ Pallasmaa 2005. P.25.

⁹⁹ Pallasmaa 2005. Pp.24-25.

¹⁰⁰ Pallasmaa 2005. P.24.

century when the superiority of vision was far less than present and the other senses were more sensitive⁹⁹. In other words, one in primordial oral culture had lived in the different sense from the current literal people, so the meaning of a word was so. Undulations, speed, tones and all the other relevant factors of speech build the meaning of words in sound, therefore a word is varyingly perceived in how it is released into auditory language. Ong argues that “*as hearing-dominance has yielded to sight-dominance, situational thinking has been replaced by abstract thinking.*”¹⁰⁰ Namely, the oral words are essentially the deep expression varies momentarily through situational factors over space while the written form calmly tells us the significance of words.

As the literacy gradually became general, many primordial oral tradition had started being written down into literary form. It progressively succeeded to preserve the endangered folklore in the original form in which it has been formerly transmitted, so that it becomes widely known among the public. At the same time, however, the pure meaning of original oral words had been lost. Literacy of oral tradition deprived the primitive rhythm and modulation of voice and transformed it into literal symbols. Only significance of the words is sedately delivered to a man through letters as literal symbols.

Verbalisation is a grave task in reality. It specifically defines the vague image of the personal sense in distinct words. The personal imagination and vague information is clearly stated in common meaning by putting into words, in consequence it prevails among the public as the most general methodology to communicate dispassionately to the others. The primordial image is generalised and loses its depth through verbalism, on the other hand, many precious cultures has been preserved and bequeathed by words.

There are several steps to be followed when literary works such as myth and epics are translated into different expression: the first step to read, the second step to understand it through words based on one’s own past experience, the third step to interpret it in his own view, then the last step to express it in his own style. In brief, the expression of literary work comes into being beyond many sensory layers of a man. It is evident in the case of Kalevala art, referred to in the following chapter¹⁰¹. The images of the same character drawn in totally different style precisely show how differently the artists interpreted it with their own sensory layers.

¹⁰¹ Refer to P.98. “*3-3 Kalevala in Expression, Influences from the Kalevala*”. The comparison of the art works themed on Väinämöinen (Pp.102-103) shows different interpretations of a certain character among artists.

The Kalevala, the main theme of following study, was originally based on the other senses than vision, since it originates the ancient poems and spells having been transmitted in oral tradition without being written down over generations. Publication of it brought visual sense to it. The original poems and spells lost its rhythm and melody to become literary culture and the compilation by the author added a certain amount of his point of view. When the Kalevala is expressed in another expressive method without words, it is almost certainly important to recover it from the visual field to the sensory world as far as possible. As Ong pointed out, the pure meaning of the word was lost at the time it had been written in a letter. Moreover the Kalevala expression essentially arises over several interpretative steps. Accordingly the primitive sense of the original poems can never be fully recovered. Needless to say, the expressive outcome is affected by interpretative steps that an artist goes through, therefore it certainly brings the different sense from the original one. Nevertheless, it is conceivably possible to bring it back to the world of sensory experience from visual perception. The most essential interest and depth of expression is exactly in the gap of senses. There is the world which is perceived only without words, while the word is significant communication tool for which nothing can be substitute.

From oral tradition to expression

3-2. Myth in Architecture and spatial design



Figure 3.2. Nido de Quetzalcóatl. The serpent waiting at the entrance.

There is a variety of mythology all over the world. Each has been passed from the ancient times by local people over generations and keeps spirits of place showing folk ideas on their origins, the natural creation or the God. It generally roots in a regional unique concept, being latent in culture, history and environment of the place. Consequently, mythology lurks in the human subconsciousness.

Mythology has been often dealt in art as an expressive motif, as it is evident in the case of the Kalevala, demonstrated in a following section¹⁰². Architecture is no exception. Mythology is occasionally appears in spatial expressions. However unlike the other art, architecture is experienced with full bodily senses under communication between space and human. In the other words, legendary themes appear in space established by human intervention. Before the Kalevala case study, mythology-themed expression from other countries is referred to analyse how oral traditions create the atmospheric phenomenon in architecture and spatial designs.

Nido de Quetzalcóatl Javier Senosiain. 2007. Naucalpan de Juárez, Mexico.

Nido de Quetzalcóatl, Quetzalcoatl’s Nest in English, is a housing complex located in a ravine filled with oak trees and caves. Under the strict condition of the site, an idea of the outstanding organic shape arose in order to preserve the forested area and to utilise an existing wild cave.¹⁰³ The image of Quetzalcóatl, the Plumed Serpent in Aztec mythology, originates in this figure resembling the snake-God¹⁰⁴. The twisting body with brightly coloured facade provides ten housings among the forest, meandering up and down from the ground. While it gives an impression of Quetzalcóatl, the winding form is also of great benefit to residents with the perfect harmony with the environment. The walkways take the nature in between the planed spaces to achieve providing small private gardens for each dwellings as the owners hoped. From various spots, the aerial views give the deep impression of the ravines and canyons spread underneath. Moreover, the twisty shape leaves most of the vast forested area untouched, therefore it preserves the existing wild nature separated from the urban environment outside.¹⁰⁵

This is conceivably a case of architecture as a self-concluded expression, whose

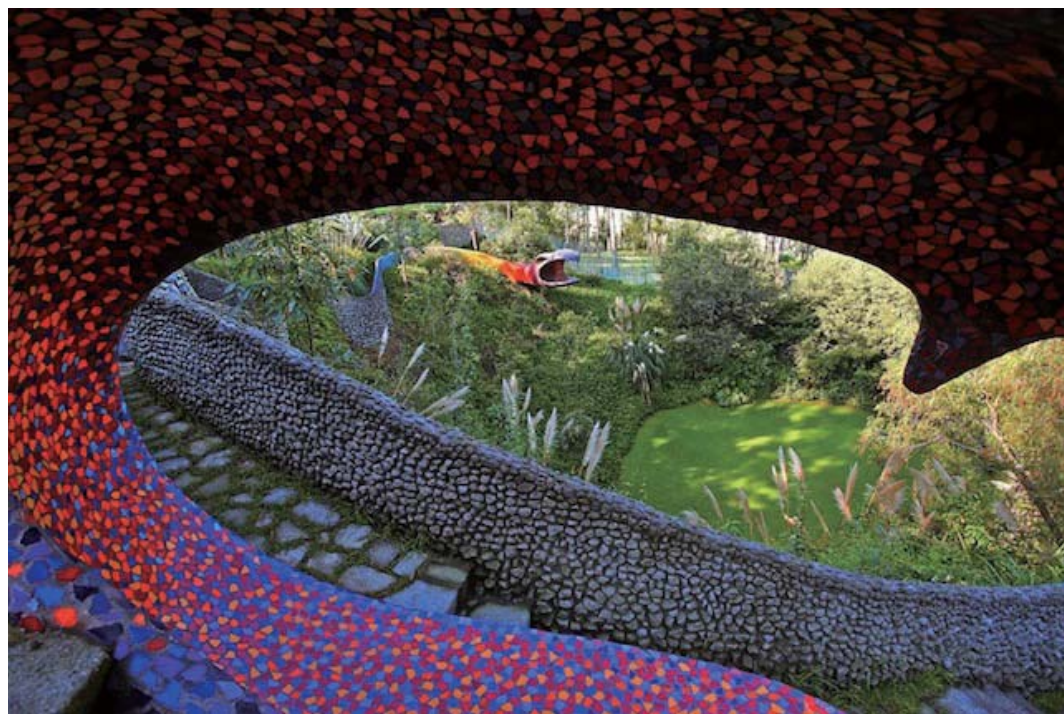
¹⁰² Refer to section 4-3. Influences from the Kalevala, P.98.

¹⁰³ Senosiain.

¹⁰⁴ Cunningham.

¹⁰⁵ “Quetzalcoatl’s Nest”.

¹⁰⁶ "Quetzalcoatl's Nest".



expressive world has been completed before human intervention. As the form clearly shows, a mythological motif is obviously displayed in the powerful ocular expression among the plenty of detailed interpretations. The meandering stone walls along the existing terrain leads visitors to the body of snake, symbolises the plumed serpent, Quetzalcóatl, enshrines among the trees. Subsequently to the conspicuous beginning of the allegorical world, various narrative scenes are waiting inside; the mysterious light shining above a common basin, a variety of relation to the nature along the circuitous body and each home desolated with organic shapes in earthy colours and a private garden¹⁰⁶. The concrete mythological world is established in advance, consequently one passively experiences its concluded design. In other words, spatial experience follows the consciousness of expressive motif. It is as if people put themselves into a tale, therefore one straightforwardly enters the mythological world even the person does not know the narrative. Architecture functions as a device to lead people into the mythology.

A point worthy of special mention is human living in a worshipped image. Mythological universe is comparatively peculiar and individual, accordingly it is generally referred in a space of public use where imaginative atmosphere is required. By contrast, Nido de Quetzalcóatl applies an ancient fabled idol in residential building where private lives of residents are directly affected by it. A motif of the plumed serpent applied not for purpose of residential advantages but arose from the site specificity. Therefore the building suitably enshrines in the surrounding nature, being conspicuous for a striking ocular-prior figure. In the context of daily life, ordinal living of a resident interacts with this vivid mysterious environment. Namely, residents become inhabitants of the mythological world. Human deeds, perception, time and all the things for life are received through the myth. In this case, architecture is not what builds its momentary space by human intervention and interaction with it. Architecture exists there as a completely established figure, and the human perceives it as a not internal but external factor.

Figure 3.3. Nido de Quetzalcóatl.



¹⁰⁷ “Huginn & Muninn”.

¹⁰⁸ “Huginn & Muninn”.

¹⁰⁹ Alperovich 2012.

¹¹⁰ “Huginn & Muninn”.

Huginn and Muninn Atelier FORTE. 2012. Piacenza, Italy.

The Nordic god Odin in Norse mythology owns two ravens as messengers. They are sent flying over all the earth everyday and come back to tell him what they have seen and heard. Names of these two ravens are Huginn and Muninn, which means “thought” and “memory” respectively.¹⁰⁷

Atelier FORTE, headed by half-Swedish half-Italian Dulio Forte, designed a small sauna atop of the Piacenza hill based on the mythology of ravens. The outdoor sauna entirely handmade in spruce wood resembles a birds gazing at the valleys below on stilts. Portholes on the walls frame the surrounding view and invite warm light into the small place.¹⁰⁸ Stove for sauna is heated by locally sourced wood, resulting in providing a zero-energy place¹⁰⁹.

Visually, this sauna expresses the mythology clearly behind the concept. It is black as ravens and shaped like a gazing bird perched on wooden legs. Adopted wood stove follows the Scandinavian tradition which fits well to the ancient legend. However, the most noteworthy expression is in experience of the place. This small sauna allows only two people to accommodate at once as two ravens sent by Odin. Through portholes on walls, one overlooks the hill and valleys spreads below at a distance as the birds in mythology view over the world. A moment of reflection and relaxation at the end of a day in sauna is an analogy with the day of the ravens come back to Odin after a long survey¹¹⁰. Otherwise, people may “report” the others what they have seen and experienced there after coming back as the ravens do.

Spatial experience is peculiar to architectural expression. Differed from any other expression perceived only with few senses, it allows people to feel an expressive object with all the senses through space. As it is indicated in this project, one perceives a mythology by behaving like a character in it. One climbs up by himself, smells the burnt wood in the stove, feels the heat of steam, looks down the Piacenza hill and comes back with memorable experience of it; as the two ravens fly over the earth, observe everything happening there and come back to report them to Odin. Expression does not remain in an object which is passively received, but gives an active perception here. One can experience the world of mythology as their own experience. It is conceivable to be a fine instance of experiential expression of a mythology in architecture.



¹¹¹ MacLeod 2014.

¹¹² Foresta Lumina. Pics and Videos “A Real-Life Enchanted Forest | Moment Factory’s Foresta Lumina” by The Creators Project.

Foresta Lumina Moment Factory. 2014. Quebec, Canada.

Among the various subjects treated in the Kalevala, a considerable major element is certainly the nature. Here is a referable spatial art in which the nature is profoundly linked to a mythological expression in Canada. Foresta Lumina is a narrative installation set among the mysterious backwoods located in Coaticook Canyon in Quebec. A light designer, a graphic designer and an architect collaborated to create a multimedia sensory experience of the magical world of mythology, utilising video mapping, light and architectural installation. After crossing the bridge as the beginning of this mysterious experience, people stroll the forest along a pathway running through seven mesmerising outdoor zones, each evoking a different magical scenario distinctly rooted in mythology.¹¹¹

The noteworthy point is that the nature abundantly deepens the mythological expression, owing to the forest utilised as a canvas. The latest high-technology is hidden behind the artistic installation of light, so that magic mysteriously appears in front of the people. Natural occurrences are carefully perceived under the concentration on the projected images on woods and the sounds emitted among the bushes: songs of birds, chirps of insects and branches swaying in the wind are encountered in the mythological context. The more one steps in the expressive stage of the forest, the more the world of myth unfolds. Consequently, ocular and aural stimuli by art effects evoke the profound bodily experience in the wildness. A simultaneous perception of the art and the nature results in this peculiar expression, as a multimedia director Marie Belzil said that wandering in the integrated environment is “*as if we are walking in this huge book*”¹¹². At a price of it, a pure original atmosphere of the forest is hidden behind conspicuous mysterious phenomena. The authenticity of the wildness is lost during an appreciation of the installation; meanwhile, the communication between the nature, the human and myth firmly links a mythological imagination to the empirical memory of the forest. Thus, mythological context in the nature brings momentary perception of expression, simultaneously has a possibility to give a huge impact on the following experience of the nature evoking this extraordinary memory.

Figure 3.5. Foresta Lumina. A bridge to begin the mysterious world of mythology.



Figure 3.6. "Portal to the past... divine cascade of the celestial river... Mayu, the Milky Way... shadows between the stars... silhouettes of divine animals shaping form of the cities... a mirador into the Incan soul...". A Stargazing Portal to the Inca Mayu - Milky Way.

¹¹³ Refer to section 3-4. *Kalevala in architecture*, "Kalevalakehto", Pp.122-125.

¹¹⁴ Price. "Spirit of place".

¹¹⁵ Price. Projects: "A Stargazing Portal to the Inca Mayu - Milky Way".

Spirit of place - Spirit of Design Travis L. Price. 1993-.

Seeking the authenticity of the place, an American architect and educator Travis Price founded Spirit of Place - Spirit of Design in 1993 as an international design-build education. Over 20 years until now, 22 projects has completed with local students in the countries all over the world, including "Kalevalakehto"¹¹³, a project in Helsinki with the Kalevala concept.¹¹⁴

Each place has own story. Responding to poetic aspects of mythology, the culture, the history and the ecology of place, architecture rebuilds an universe of a tale on the site. For example, one of their project in 2000, "A Stargazing Portal to the Inca Mayu - Milky Way" evokes a folk view on the firmament of the Inca. The project launched to build a gateway to the mysterious abandoned citadel of Machu Pichu in Peru. The metaphor comes from the astronomical notion of the Inca. When staring the heaven, they do not look at the luminous dots of stars but the dark spaces in between. They see the divine animal shapes in it, which the Inca builders reflect in the architectural reality, like projecting it down upon the earth. As the gateway to the Inca trail, the design applied this ancient concept. The minimalist platform in classic structure with logs and stone plinths created a telescopic view port of the moving sky. The water from the raging steam is channelled into a simple still pool in order to reflect the dark sacred animals above, as the Inca project them down upon the city. The gateway gives an opportunity to perceive the world through the eyes of the them, consciously people are literally in the Mayu of the Inca there.¹¹⁵

Contrary to this mythological aspects, historical tale deepens the spatial specificity in another project, "The Crossing - Downpatrick Head", perfected in 2014 in Ireland. It is an instance of adapting legendary story of place into a depth of the nature. The site is on the Irish western coast where cultural history and the eternal sacred meet under the untamed condition with thunderous views, land art, living 5000-year-old ruins and mesmerising islands. The project refers to the confrontation between Patrick's word of God and the Druid Priest's Crown Dubh's animist power, which originates in the place. All artificial distractions are removed except a sacred observation tower, the nest of the Irish "saygulls", reporting the torpedo demons. In addition, Eire 64 stones were restored in a way historical ancestors originally placed. It exaggerates the natural power if the blow-hole and the sea stack. The Crossing enshrines there quietly yet firmly, re-

¹¹⁶ Price. Projects: *"The Crossing - Downpatrick Head"*.

vealing the historical tale of the place.¹¹⁶

Mythology deep roots in the spirit of place, at times sacredly, at times fragilely. The projects distil authenticity of place to restore it in the site. Reading the site, understanding the indigenous culture and applying proper materials to design. In balance of all those factors, a vernacular story is transformed into spatial expression to provide a mythological view of the world to people. The ingrained aspects is evident in the positive interest of the locals in most of projects. Metaphor of them are all native characteristics grown over ages, although they appear in different form; mythology, folklore, the historical tale, the culture or the natural power. The monumental elements pick the indigenous notion, distil and exaggerate it, and sometimes reveal the lost quality of it. Thus, architecture makes mythology alive in the present world.

Mythic architecture awakening vernacular spirit

Mythological interpretation deepens the understanding of the place. Architecture brings the indigenous notion into specific form in order to rebuild the place forcibly or delicately. It sometimes builds up the unique universe of a legend, sometimes stimulates sensibility modestly, and sometimes evokes vicarious experience of a story. The eminently essential is the methodology to project metaphor on the place. Mythology exists in a balance of various elements; the nature, cities, the environment, building materials, architectural context and human beings. The poetic axis distils native authenticity of place and revives evanescent tales behind the cultural homogenisation. Awakening the vernacular spirit is conceivably one of present architectural manners to evoke the profound experience of the place, in a sense.



Figure 3.7. *"Lapping turbulence weaves... reflections forgotten... surging eruptions unveil the sea of seeing..."*. *The Crossing - Downpatrick Head*.

Kalevala in Expression

3-3. Influences from the Kalevala



Figure 3.8. Erik Cainberg. Väinämöinen soitto, 1814.

As a national epic of Finland, Kalevala has attracted various people in various backgrounds for centuries. Especially its influence in art scenes, such as paintings, sculpture, music, literature, dramas and architecture, is worthy of special mention.

First appearance of Kalevala theme in the history of Finnish art was in 1814.¹¹⁷ At that time, even *Vanha Kalevala*, the first edition of the Kalevala, was not compiled yet. *Väinämöinen soitto* (Väinämöinen playing the Kantele), the first Kalevala art dedicated to Turku Academy, is considered to be sculpted on the idea from previous investigation into folk poetry. In fact, Finnish folk poetry was collected and studied from sixteenth century onward, however, it never brought any achievements in Finnish art for a long time.

The main trend toward the Kalevala themes in art started in the middle of nineteenth century. An artist Robert Wilhelm Ekman and a sculptor Carl Eneas Sjöstrand innovated subjects of Kalevala into their art works after the publication of the *Kalevala* in 1849.¹¹⁸ Since folk poetry had not been a main interest in art for a long time, and since there were no visual images in oral tradition, the common image of the world of the Kalevala was created during this period through visible art works, although the artists saw the Kalevala through their own lens. At the same time, it is conceivable that it contributed to let the people feel familiar to the Finnish folk poetry in a readable and luminous epic style.

In 1860s, a basic education system was officially established under the aim to familiarize an authentic Finnish art culture and the Kalevala to whole Finnish nation¹¹⁹. Through this movement, shorter version of the Kalevala was established for children likewise Elias Lönnrot himself compiled the one for schools. Those publication helped a lot to prevail the Finnish folk poetry with the images of the Kalevala from illustrations in it.

In the end of nineteenth century, Kullervo and Aino became more popular in art¹²⁰. There was not only an original tendency for the Finnish art to prefer dark and cold atmosphere but also philosophical instruction that Lönnrot hoped to teach through these two characters, who tried to adapt themselves into social life but failed. This trend and the principle of education popularized those characters among children, together with Lönnrot's instructions. Thus the Kalevala started to take an important rule in educational scenes both to prevail Finnish

¹¹⁷ Ateneumin taidemuseo & Valtion taidemuseo 2009. P.11. "What are Kalevala images built from?" by Ojanperä, Riitta.

¹¹⁸ Ateneumin taidemuseo & Valtion taidemuseo 2009. P.15. "What are Kalevala images built from?" by Ojanperä, Riitta.

¹¹⁹ Ateneumin taidemuseo & Valtion taidemuseo 2009. P.16. "What are Kalevala images built from?" by Ojanperä, Riitta.

¹²⁰ Ateneumin taidemuseo & Valtion taidemuseo 2009. P.18. "What are Kalevala images built from?" by Ojanperä, Riitta.



Figure 3.9. Akseli Gallen-Kallela "Aino-taru, triptyykki". 1891.



Figure 3.10. Mauri Kunnas "Koiramainen mukaelma Akseli G-Kallelan Aino-triptyykistä"

folk culture and to teach children philosophical instruction arose from ancient life.

In the beginning of nineteenth century, an idea came up among the people that the indigenous national culture can form the base of Finland. The artists and the educated had a tendency to seek ancient style of the original national culture. Simultaneously, more artists directed their interest toward the visual expression of the world of the epic. This trend was followed by the most active age of the Finnish art, called the 'Golden Age'.¹²¹

In the end of the nineteenth century, exponents of the Finnish art, such as Akseli Gallen-Kallela, Pekka Halonen, Väinö Blomstedt, Louis Sparre and I. K. Inha, reached a stage of expression of the Kalevala¹²². They saw the ancient Finnish folk life in the epic as their origin and admired the landscape of Karelia as a last sanctuary. This idea was also lifted in the eyes of Finnish artists in Paris, which was a major destination to study art under better educational circumstance. They considered the Kalevala as a symbol of Finnishness and set off to Finland to seek the origin of authentic national culture.¹²³ Many artists visited Finnish hinterland Karelia where the original poetry arose and the real Kalevala life still exists: Akseli Gallen-Kallela took a journey to Kuhmoniemi, Pekka Halonen to Lake Ladoga region in Karelia, Louis Sparre and Emil Wikström to Russian or Dvina Karelia and Eero Järnefelt to Koli fell region.¹²⁴ At the same time, Some artists united in exerting for the Finnish culture under Russian inspection, which is so-called Young Finland Movement, including Pekka Halonen, Jean Sibelius, Eero Järnefelt, Juhani Aho, etc. as members¹²⁵. This huge phenomenon lasts until the beginning of twentieth century, later widely known as Karelianism. The art during this decades created the symbolic image of Finland.

In 1911 (officially in 1919), the Kalevala Society¹²⁶ was founded by artists and scholars attracted by Karelia, its folklore and the Kalevala. The purpose is "to disseminate, research and publish knowledge relating to the Kalevala and the Finnish cultural heritage. The Society also seeks to combine science and the arts and to promote art working with Kalevala-related themes."¹²⁷ Many exponents of Karelianism from various fields exerted for the society and it carries out its original intention still now over a century.

After this notable phenomenon for decades, the Kalevala was widely known by

¹²¹ Ateneumin taidemuseo & Valtion taidemuseo 2009. P.12. "What are Kalevala images built from?" by Ojanperä, Riitta.

¹²² Ateneumin taidemuseo & Valtion taidemuseo 2009. P.13. "What are Kalevala images built from?" by Ojanperä, Riitta.

¹²³ In that period, art works represent exotic atmosphere gathered the attention, therefore people were attracted by small and unknown Finland. Paris World Fair held in 1900 encouraged this trend.

¹²⁴ Taidekeskus Retretti 2005. P.111.

¹²⁵ Taidekeskus Retretti 2005. P.103.

¹²⁶ The Kalevala Society is the only foundation in the world dedicated to its own national epic. The Kalevalatalo was designed by Eliel Saarinen in 1921 for this society with concept of the Kalevala, yet never built. Refer to Pp.117-121 for more information.

¹²⁷ "The Kalevala Society"



Figure 3.11

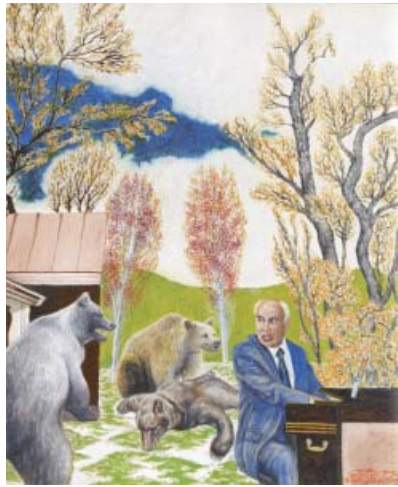


Figure 3.12



Figure 3.13



Figure 3.14



Figure 3.15

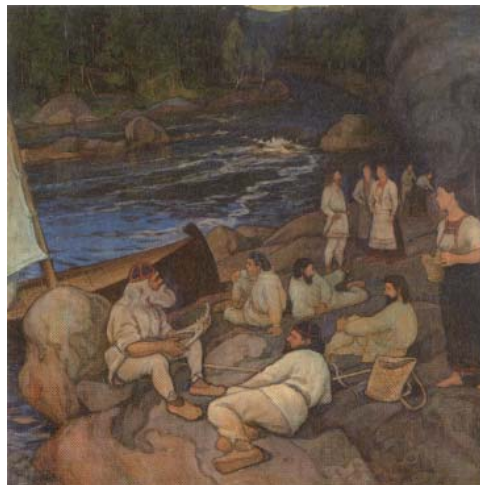


Figure 3.16

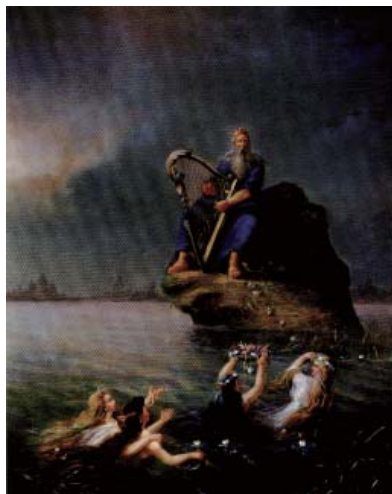


Figure 3.17



Figure 3.18

Figure 3.11-18. Comparison of paintings referring the same motif, "Väinämöinen playing kantele", demonstrates different interpretations of the same heroic character.

11. J. Z. Blackstadius "Väinämöinen kiinnittää kielet kantaleeseen". 1851.

12. Matti Waskilampi. Interpretation of "Väinämöinen soitto". 2008.

13. Anders Ekman "Väinämöinen". around 1852.

14. Emil Cedercreutz "Väinämöinen soitto".

15. B. A. Godenhjelm "Väinämöinen soitto".

16. Pekka Halonen "Väinämöinen soitto". 1897.

17. Rudolf Åkerblom "Väinämöinen soitto". 1871.

18. R. W. Ekman "Väinämöinen soitto". 1858-69.

¹²⁸ Järvinen 2010. P.98. "The Kalevala and the arts"

many people, not only artists, scholars or children, but also the general public. As a consequence of publication of translated version into more than sixty languages, following the first translation in Swedish in 1841, the Finnish national epic spread all over the world. Although some activities related on the Kalevala was done before that, the one of the most notable influences to abroad is, for example, the theatrical performances in Hungary. The first stage of this big trend was done in Budapest in 1970 by the Hungarian theatre Thalia and its director Karoly Kazimir, later played in the Helsinki City Theatre¹²⁸. After the first stage onward, this current continues still now.

It is said that the number of the Kalevala-themed artworks is overall nearly 2,500 including any kind of art: paintings, graphics, sculptures, illustrations, etc. In each, the artists use their own ways of expression for the image of the world of the Kalevala. As the epic is understood in different way by each people, so the artworks shows different views of artists on the Finnish folk poetry. In a word, the Kalevala arts show the artist's experience of Finnishness through the epic. The primal folk poetry compiled in the Kalevala was originally passed over ages in oral tradition. There were no visual images on it. People meet the Finnish authentic nature, culture, landscape, folklore or their origin through the lens named 'Kalevala', adding their personal views or social background of the time.

¹²⁹ From cantos 41 and 44 of the Kalevala.

Giving examples, different images on Väinämöinen can be seen in arts with the theme, 'Väinämöinen playing the kantele'¹²⁹. Since Väinämöinen has often been translated into a variety of images as the most popular character, this scene, which his alluring kantele performance enchant all the living things, clearly emphasises this inclination. The different characteristics on him are formed by his clothing style, face and relation to the other people. Some arts treat him as if he is goodness while he sometimes looks like an ordinary patriarch, a priest, or even an office worker in suit. He is a great hero of the world and a familiar neighbour at the same time.

In another case, theatre plays show both tradition and trends of today. On one hand, opera in classic style follows the story of the epic, showing the historical background and the folk life of the age of the Kalevala. On the other hand, there is another types of play which includes present social interests. For instance, in a play *the Kalevala* performed by Forte Company in 2010, the authentic Finnishness produced in contemporary direction with a polar bear who talks about

¹³¹ Ateneumin taidemuseo & Valtion taidemuseo 2009. P.6. "Foreword" by Maija Tanninen-Mattila.

Maija Tanninen-Mattila, the director of Ateneum Art Museum, says, "*There is no 'right way' to interpret the Kalevala.*"¹³¹ Since the epic has several themes, it has meant different things at different times. This profound imaginary world has produced various interpretation and has attracted people throughout the ages. What is more, since there is genuine national identity behind it, secondary influences occur. One work whose theme based on the Kalevala, interpreting Finnishness, sometimes gives a influence on another work; some painters were influenced by literatures as well as visual arts attracted composers. In conclusion, the expression of the Kalevala means interpretation of Finnishness through the epic and our own lens, that is to say, our own views and experiences. The current image of the Kalevala can be said a synthetic outline built by different artists from different ages.



Figure 3.19. Károly Kazimir "Kalevala" at Oulun Kaupunginteatteri. 1972.



Figure 3.20. Akseli Gallen-Kallela "Lemminkäinen äiti", 1897.



Figure 3.21. Akseli Gallen-Kallela. "Kullervon kirous", 1899.

Social tendency implied in the Kalevala art

There is a remarkable tendency in the trend of popular theme in Kalevala art. The most popular character over the ages is obviously Väinämöinen, the main heroic character of the Kalevala. His image has been captured in various ways by many artists. The noteworthy in social tendency is, however, Lemminkäinen and Kullervo whose popularity follows Väinämöinen's. The tendency of the vogues for these two diametrical opposites are worth being compared; Lemminkäinen

is popular when Kullervo is modest, and vice versa.

The popularity on Lemminkäinen rises in the 1910s and approximately from the 1950s to the 1990s, which is very close in resemblance with Väinämöinen although the former has been used less than the later. On the other hand, the one of Kullervo swells in the 1900s, the 1930s and the 1990s. In general, Lemminkäinen becomes more popular when the Kalevala art has on the downward trend, while Kullervo takes a mirror image of it.¹³²

Lemminkäinen was popular in more peaceful time when the nationalist issues eclipsed. In fact, the high interests on him is marked in the period of Finland's independence and in the post war era. Lemminkäinen is a reckless and optimistic man, always making troubles caused by his thoughtless behaviours without listening to his mother's admonition. Consequently, he has a lot of enemies, nevertheless he is loved by surrounding people apparently because of his character. This optimistic character might be well accepted when the nationality is steady. Likewise, Väinämöinen as a heroic character is so.

On the other hand, the popularity of Kullervo, which follows the trend of Kalevala art, is an indicator of strong pursuit of the authentic Finnishness since the Kalevala tends to gather attention as a symbol of it when Finland's national inviolability is threatened. Kullervo is a lonely character who lives his entire life only for revenging for his family. His life is full of enmity, despair and sorrow which consequently reveals dark side of human beings in cantos where he appears¹³³. As representation of the essence of humanity, Kullervo is focused on more to grasp what human beings are, together with Finland's origin or ideal folk life when people is interested in seeking authentic Finland under unstable occasions. Stronger the national feeling arise among the people, more Kullervo is adopted as a motif in art.

Motives in art go with the tide. As the Kalevala stays in the main focus in Finnish art for decades, the Kalevala art essentially reflects the social movements of the time in its motives and expressions. The popularity between these two diametrical opposites, Lemminkäinen and Kullervo, is preciously a clear instance to read the national current of Finland. Therefore it is conceivable that Kalevala art follows the state of the country as an indicator to know the trend of public sentiment.

¹³² Ateneumin taidemuseo & Valtion taidemuseo 2009. P.51-52. "Kalevala art in Finland, 1850-2000" by van der Hoeven, Adriaan

¹³³ Poems 31-36.

Kalevala in Expression

3-4. Kalevala in Architecture



Figure 3.22. Frescos in the entrance hall of National Museum of Finland, telling the Kalevala story. (2015)

Like many Finnish artists, architects have also referred the Kalevala in design and their interpretation is rich in variety. As architecture contains wide-ranging elements, it gives architects abundant possibilities of expression, from the visual image of structure to the atmosphere in space. Perceptual experience offered by architecture also makes it intricate but interesting. There are generally three types of architectural expression of the Kalevala: 1. Architecture following the Karelian style; 2. Architecture represents the beauty of nature; and 3. Architecture expressing the world of the Kalevala. Different construction can be found in each feature.

1. Architecture following the Karelian style

Before referring to influences from the Kalevala, the features of Karelian architecture should be mentioned. Karelia, a cradle of folk poetry, had been a Finnish hinterland for ages. The isolated area separated from both west Finland and Russia thus hold independent culture. The features resulted from the nature and qualities, forms and methods arose from the natives¹³⁴.

The specific characteristic is firstly the material. They use almost one hundred percent single material for everything, from the structure, facade, doors to joints. The original shape and size of trees appear in the structure without colouring. The small parts of wood which is not used for building construction transform into furnitures, therefore whole building including furnitures is strongly connected each other under feeling of wild nature. Another characteristic is the flexibility of spatial development. In Karelian style, construction begins with a small cell as a shelter for people and animals, then enlarges volume of building little by little as it were a biological-cluster of cells. This growing house forms jumble of roofs with inconstant angle, adopting surrounding nature. Thus, Karelian architecture is a symbol of harmony between human life and nature.¹³⁵

From the 1890s to the 1900s, when the art was in the golden age of Karelian-ism, many artists travelled around Karelia to seek national authenticity, so that were attracted by the alien culture of Finnish hinterland. They built their own houses and studios there as a place to dedicate themselves to artwork in authentic nature surrounding. The building itself was built in Karelian style and the details of the interior were designed and made by artists themselves¹³⁶. Whole the

¹³⁴ Schildt 1997. P.115-119. "KARELIAN ARCHITECTURE" by Alver Aalto.

¹³⁵ Schildt 1997. P.115-119. "KARELIAN ARCHITECTURE" by Alver Aalto.

¹³⁶ Järvinen 2010. P.94-95. "The Kalevala and the arts"



¹³⁷ Taidekeskus Retretti 2005. P.103.

Figure 3.23. The library corner of the Halosenniemi studio in 1905.

building, from the structure to small decorations and furnitures, referred motifs in native architecture.

A representative example, among artists moved to Karelia, is Pekka Halonen. After seeking real Finnishness in Kalevala, he moved his base into Tuusula, the north of Helsinki, where many popular artists also settled. He completed building his log studio home named *Halosenniemi* in 1902, later functioned to assemble artists of the area. Karelian houses was a major source of ideas on his home to make a vital link to surrounding nature. The close harmony with authentic wildness gave him abundant inspiration on his paintings, that makes him famous as a master of Finnish winter landscape.¹³⁷ Incidentally, this trend is also seen in another artists' houses in Tuusula; *Suviranta* by Eero Järnefelt, *Ahola* by Juhani Aho and *Ainola* by Jean Sibelius.

Thus, the Kalevala is only a trigger to start looking for genuine Finnishness. As a consequence of seeking origin of Finnish culture, people arrived at Karelia, a cradle of ancient folk poetry. They put themselves into the world of the epic, following native life style. In a word, architecture is where people experience the Kalevala by themselves, as if they were one of characters of the epic. Architecture exists only for residences, that is to say, expression toward inside.

As the Kalevala was originally published for the purpose of preserving invaluable folk poetry, this inclination to quest for the origin of the epic meets the author's aim. Moreover, it is admirable that people noticed their own origin in ancient folk culture at the time when Finland became independent. However, it is sensitive to refer the tradition in the current life. The Karelian architecture arose from the folk life of the age, thereby a simple imitation of it merely results in an outworn building. As time has passed, so life style has changed. When referring a tradition in architecture, the most essential is to bear the difference between replicas and applications in mind.

Concerning Halosenniemi by Pekka Halonen, the traditional Karelian style is seen in its wooden structure, the room arrangement and the details, while the two-story-high studio innovates Halonen's own design with a large window which is not found in the folk methodology. The studio is settled in the connection to the other rooms in the ground floor, simultaneously a corridor of the upper floor appears above the studio like a balcony. The tradition is naturally

adapted in his lifestyle of 1900's, seen in the combination of the housing area in the traditional method and the studio in his own design.

As some buildings differing from the expressive methodology of Haloseniemi, it is valuable to fully imitates the nostalgic motif at some points. This is obviously one way to pass down a cultural tradition clearly from generation to generation. However, it is also significant to represent native folk culture and its architecture style by interpreting some points in current manners to fit new life. Essential tradition should be succeeded as it is, while adaptable part will be transformed in the present mode. Seeking proper ways to express cultural tradition in current life is now vital to leave authentic Finnishness for the future.

2. Architecture represents the beauty of nature

In the end of the 19th century, the Kalevala motifs came to appear in architectural decoration. An encounter with the Kalevala interested people in their origin which they tend to consider to be in Finnish grand nature. As a consequence, architecture started representing the beauty of nature. It is so-called Art Nouveau.

Art Nouveau was born in Europe in the end of the 19th century under the trend of architecture and crafts to seek national identity. Leaving classical modes behind, free arranged style adopted in facade, form, and decoration. In Finland, the phenomenon grew together with basic idea of Karelianism, that authentic Finnishness is identified in nature. The natural motifs were directly represented in facade, windows, gates, balconies and towers and those details were decorated by statuesque representation of natural objects, such as trees, leaves, animals and organic curves.¹³⁸

Since the idea of Art Nouveau and Karelianism is similar in many points, it is hard to know the buildings really influenced by the Kalevala. Some architecture interpreting the image of the epic by using natural motifs while the others represents only the natural beauty without being inspired by the epic. Among Jugend styled architecture, the best known Kalevala architecture is *the Pohjola Building*. The building is built in National Romantic style in 1901 by young architects trio, Herman Gesellius, Armas Lindgren and Eliel Saarinen¹³⁹, who are famous with design for Finnish Pavilion in Paris World Expo in 1900. The notable is its



Figure 3.24. Pekka Halonen “Talvinen järvimaisema(Tuusulanjärven kevätjäätä)”. 1927.

¹³⁸ HELSINKI is one of the finest Art Nouveau cities in Europe.

¹³⁹ HELSINKI is one of the finest Art Nouveau cities in Europe.

¹⁴⁰ Ateneumin taidemuseo & Valtion taidemuseo 2009. P.84



Figure 3.25. Herman Gesellius, Armas Lindgren and Eliel Saarinen "The Pohjola building", 1901. Impressive sculptures Pohjola and Kullervo by Hilda Flodin decorates both side of the entrance. (2015)

ornament on the facade, designed by Hilda Flodin. The sculptures at the main entrance is one of the famous architecture representation of the Kalevala for its outstanding faces watching passers-by.¹⁴⁰

An architects group designed *National Museum of Finland*, another masterpieces of Jugend architecture with Kalevala motifs, from 1905 to 1910. The detailed facade decorations and a bear statue in front of the entrance are fine enough to catch our eyes, not only that, magnificent frescos are waiting for visitors in the main hall behind the entrance door. The frescos were painted by the best-known Kalevala artist Akseli Gallen-Kallela. It has welcomed guests from the ceiling over century and has brought them into the world of Finnish national epic, in the main hall of National Museum of Finland.

The highly evident feature of this type of architecture is its representation of natural motifs. The direct expression of objects shows detailed decoration shaping nature as it is. Architecture looks like pieces of sculpture rather than buildings. Another characteristic is that expression is toward public, compared to first type of expression (confer. 1. Architecture following the Karelian style). Many of those architecture are actually in public use such as stations, museums and company office buildings. Because of this clear ornaments and elaborate design, buildings catch people's eyes to stop by and to see what they are. This artistic quality and design toward public succeeded to bring Finnishness into the city in easy understandable way.

Meanwhile, one question occurs; what are differences between expression in art and in architecture? Architecture is conceivable to be a kind of art in some points, however, at the same time, it has strong characteristic to separate it from art, that is to say, experience of expression. Unlike artworks relying on visual perception, space in architecture is perceived with full of our body. In case of this expressive type, nearly all the representation of the nature depends on ocular perception. Needless to say, this visual images produce atmospheres into spaces, yet only as adornment. The building is recognised rather as objects than as space, thereby the direct communication to it is more the meeting between a person and object without including the space. Compared to the other spatial expression, it tends to have less connection to our other perceptions but vision unless it has other sensory factors to be perceived.



Figure 3.26. Detailed decorations on the exterior wall of National Museum of Finland.



Figure 3.27. Detailed decorations on the exterior wall of National Museum of Finland. (2015).

The essence of this type of expression is in its artistic grace. This method is generally the easiest way to exhibit what architects want to express through design to the public, as long as visual perception predominate over other senses. It is able to be said that this is architectural expression in the field of art; the building has the powerful artistic elements in it. In other words, this visual expression has possibility to make architecture both an object to be seen and a space to be experienced at the same time, cooperating with other sensory expression. Clear sculptural beauty supplements the artistic stimulation to feel the atmosphere of the space. Perceiving the visual presentation on the motif is the definite beginning of architectural experience in the world of epic.

3. Architecture expressing the world of the Kalevala

Unlike previous two types, this is expression of the Kalevala itself. The aim of this architecture is to express the world of the Kalevala without any other vehicle such as native life style nor natural motifs. The concept of the epic is straightforwardly influenced into architecture design with different interpretations by architects. Therefore, the variety is wide. Basically they can be categorized into two style: Direct expression which represents characters, subjects or scenes from the Kalevala, and abstract expression which interprets the world or atmosphere of it. The former is like artwork rather than spatial design, mainly relying on vision, in addition, some of Art Nouveau architecture with clear Kalevala motif can be included also in this category. On the other hand, the latter is based on special feature of architecture, spatial experience, which is perceived with whole of our body. Some architecture contains one of those style while others uses both. Since the Kalevala as a national epic has originally no connection to architectural notion, consequences are clearly influenced by different views and different interpretations of architects. Some reference projects are studied below to find out how previous architects interpret the Kalevala into architecture design with their own thoughts, as follows.

Kalevalatalo Eliel Saarinen. 1921. Munkkiniemi, Helsinki.

This is probably the first architecture interpreting the world of the Kalevala into spatial design. In the movement to seek and preserve Finnishness after

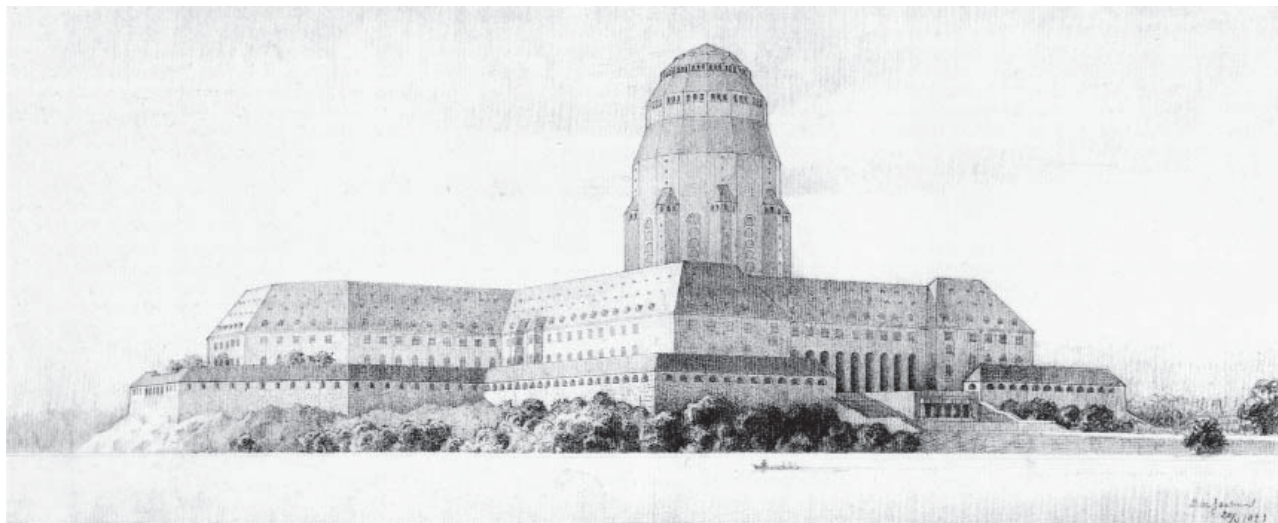


Figure 3.28. Drawing of Kalevalatalo by Eliel Saarinen.

independence of Finland, the Kalevala society launched into a project to build a centre of national cultural research, a complex of an auditorium, a research centre, a library, a museum, workrooms and apartments. Thus, Eliel Saarinen, commissioned by the society, finished the first sketch of *Kalevalatalo* (Kalevala House) in 1921.

Although Kalevalatalo remained unbuilt, this idea shows remarkable keys to transform the Kalevala theme into architecture. The most striking object is a great tower rising above the whole complex. Comparing between sketches, Saarinen seemed to pay the most attention to this eighty-meter-high tower. The shape is heavier and more massive than Saarinen's other works, therefore it emphasizes the steady image of the ancient heroes of Finnish people. The heavy granite material helps to show unshakable existence of cultural treasure of the nation. The Kalevala motifs can be found also in its foot. Tuonela, the world of death, is interpreted deep in the rock with silent tombs of great Finns of the past, decorated by frescoes on vaults and by statues on walls.¹⁴¹

¹⁴¹ Museum of Finnish Architecture 1990. Pp.185-186. "KALEVALATALO"

Not only those techniques on spatial feeling, this project also has visual expression in some part. A museum in Kalevalatalo was to exhibit sketches by Akseli Gallen-Kallela and some manuscripts from Jean Sibelius while workrooms and apartments were designed for artists. Some vaults and walls were decorated by paintings or statues, moreover, some of the walls were reserved for prospective new art pieces related on the Kalevala. In addition, Munkkiniemi headland with beautiful marine view and great rocky outcrop was a perfect location for Kalevalatalo.¹⁴²

¹⁴² Ateneumin taidemuseo & Valtion taidemuseo 2009. Pp.154-157. "Independent Finland's Kalevala fantasies and public art works" by Ojanperä, Riitta.

Although it is hard to analyse this with only several drawings or sketches left, it seems the collaboration of all those factors in expression let the whole architecture into Kalevala atmosphere. Frescoes and statues are applied to add cultural and muscular impression on visual image which usually tend to be abstract in architecture, giving wealthy experience for visitors in mythic feeling. Unlike other Jugend architecture which has Kalevala motifs as decoration on facade, interior statues and frescoes here assists abstract expression. For instance, Tuonela atmosphere of underground space is supported by art pieces on its walls and vaults, that clearly displays the images which the then artists held for the epic. At the same time, the whole building shows basic unshakable image of the national epic with its material and shape. The value of the base of national cultural

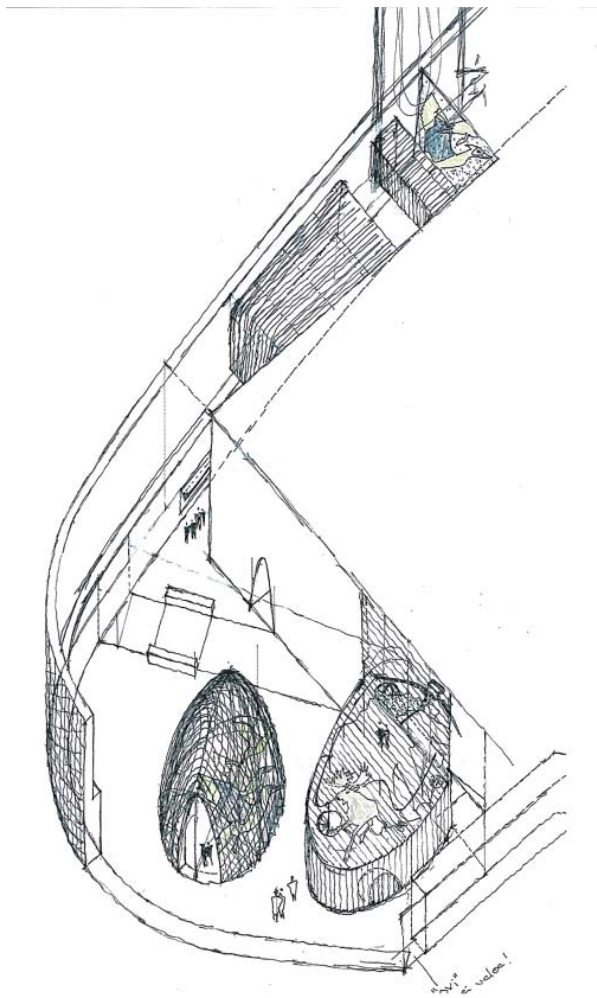
research met essence of the mythology deep rooted in Finland. Thus, various methods interacts each other effectively to express the existence of the Kalevala in Finland, although there is no way of knowing how space stimulates other senses than vision since it is an unbuilt architecture.

Finnish Nature Centre Haltia Lahdelma & Mahlamäki Architects. 2013. Espoo.

Haltia is a nature centre with exhibition, restaurant and conference service in Nuukio National Park area. It provides friendliness between Finnish natural environment and human with its energy system adopting the sun and the earth, fully wooden material for whole building and flexibility on use of space.¹⁴³ This eco-friendly architecture, at the same time, is notable as Kalevala architecture. An incubation of Common Golden-eye is interpreted into whole building shape toward Pitkäjärvi next to it, with egg-shaped exhibition space inside. The exhibition shows the wealth of beautiful Finnish nature changing every season, every time of the day. Visitors learn abundant wildness of Finland through lens of the mythology.

Incubation of Common Goldeneye is the first scene of the Kalevala. In the first canto, the bird flies to the Air Vergin Ilmarta and lays eggs on her knee. The eggs dropped into ocean, break into pieces and then each part of eggs transform into the ground, the sky, the sun, the moon, the stars, and the clouds.¹⁴⁴ This incubation is very beginning of the Finnish national mythology embodies authentic Finnishness, and simultaneously it means the ancient thought on the origin of the Finnish nature.

This architectural expression is experienced in various levels. One first sees the visual image of the bird, then goes into the fully wooden building in which people experience the architectural space and exhibitions concerning about the Finnish nature. Feeling the mythic motif from the egg-shaped exhibition space and building itself, one looks over the surrounding beautiful forest on the terrace. The Kalevala as an object to be experienced, the exhibitions and a building to be touched and the nature to be seen. Various factors intermingle in several perceptual levels, so that the Kalevala and the nature are experienced both sub-



¹⁴³ MacKeith 2014. P.37

¹⁴⁴ Poem 1 of the Kalevala.

Figure 3.29. Drawing of Haltia's exhibition space by Lahdelma & Mahlamäki Architects.



Figure 3.30. View from outside toward inside of Kalevalakehto. The ceiling, windows and doors reflects objects. The sea becomes the sky, the sun light and trees meet inside the building, and we find many 'ourselves'. (2014).

jectively and objectively.

The architectural expression create scenes in which the Kalevala, the nature and the human beings live together. In the building as the symbol of the Creation, people see the nature outside from the world of the epic: people feel the epic on “our own side”. After that, people wander around the native wildness in the national park. Here, the architecture is the beginning of the experience of the authentic Finnish nature, as if the incubation of Common Goldeneye is the beginning of the world.

Kalevalakehto Travis L. Price. 2010. Seurasaari. Helsinki.

Seurasaari is one of islands in Helsinki where people meet the Finnish ancient life through Open-Air Museum, the collection of historically important houses from around Finland, in beautiful ocean landscape. At the tip of the island, there is a small new building facing to the sea. This is Kalevalakehto, Shaman’s Haven of the Kalevala. It is a minimal hut for meeting or meditation, designed as a part of *Spirit of Place* project¹⁴⁵ and performed an important role in opening of Helsinki Design Week 2010. Combination of wood, steel and glass translates three of themes in the Kalevala: the myth of seven eggs of the world’s creation, the mysteries of the Sampo as a metaphor for creativity and innovation, and the shape-shifting shamanistic character of Väinämöinen¹⁴⁶. The architect Price was simultaneously impressed by an idea of Finnish architecture; building along the nature, respecting the nature. Therefore Kalevalakehto was placed disturbing only little part of existing landscape.¹⁴⁷

In Price’s words, “*You see the sea, and the water becomes the sky in the ceiling above. That’s the magic we wanted to achieve*”¹⁴⁸. Narrow glass windows above the walls invite pieces of light to inside where the steel roof reflects the outdoor scenery from openings. Wooden curved walls hold us in its placenta as its name Kalevalakehto means Kalevala ‘cradle’, whose ship-like framed space toward the sea reminds people of the heroic character Väinämöinen, sailing to Pohjola. Furthermore, the layers of glass doors let one recognise the own existence by projecting one’s figure as well as surrounding scenery, as if ‘I’ find ‘another me’. Thus, the surrounding environment is clipped, reflected and abstracted to be a

¹⁴⁵ Refer to 4-2. *Myth in architecture and spatial design: Spirit of Place - Spirit of Design*. Pp. 94-97.

¹⁴⁶ Price. Projects: “*Kalevalakehto, the Shaman’s heaven of the Kalevala*”.

¹⁴⁷ Marten 2010.

¹⁴⁸ Marten 2010.

¹⁴⁹ Marten 2010.

¹⁵⁰ Martin 2010. The information was correct as of September 2010.



Figure 3.31. Exterior of Kalevalakehto. (2014).

part of the space. Compared to Haltia¹⁴⁹ where the forest is viewed as scenery, the nature is perceived in the spatial expression here. The architecture embodies the poetic world of the Kalevala inside its cradle by collaborating with not too much nature but enough. The nature never appears in its true colours inside the building but in effective ways. In addition, this building is alive, that means it is settling little by little, for the reason, whose bolts require to be adjusted every two monthes¹⁵⁰. The building achieves to hold the Kalevala atmosphere inside with proper relation to the nature and will gently adapt into surrounding environment as time goes on. It succeeded to find a new relation between space of the poetic world and the nature, in which one can respect others, and vice versa.

When a thing is perceived without any words, antecedent images by them never appears, so that its experience purely becomes sensory. The pure momentary perception creates the own experience of the space. That is a meaning of architectural expression. In Kalevalakehto, the authentic environment is all perceived through the Kalevala world differently from what is outside of it. The nature becomes internal bodily experience through the spatial factors. Namely, architecture builds the human perceptual criterion into the wild environment by applying the mythological concept, so as to interact to the nature being perceived as a part of the expression of it. One experiences the filtered nature in the human scale and feels the immeasurable depth of it. At the same time, one recognises oneself as a part of this spatial phenomenon through self-consciousness by definite bodily perception and the projected image of oneself on the layers of the glass. The mythological world is indeed alive here, for people, for the nature and for architecture.

Pauanne Tapani Hietalahti, Pauli Lindström and others. 1984-1992. Kaustinen.

There is numerous ways of expression in architecture design. Some applies visually direct representation while some interprets abstract atmosphere. Some utilizes several expressive methods in one design and its proportion is different in each. In its multiple metaphor, Pauanne is one of noteworthy instances.

In the early 1980s, one project started in order to build a centre for folk music



¹⁵¹ Ateneumin taidemuseo & Valtion taidemuseo 2009. Pp.227-233. "Building an alternative -organic forms and Finnish mythology" by Ikkala, Marja-Leena.

¹⁵² From poem 12 of the Kalevala.

¹⁵³ Ateneumin taidemuseo & Valtion taidemuseo 2009. Pp.227-233. "*Vaihtoehdot rakentamassa*" by Ikkala, Marja-Leena.

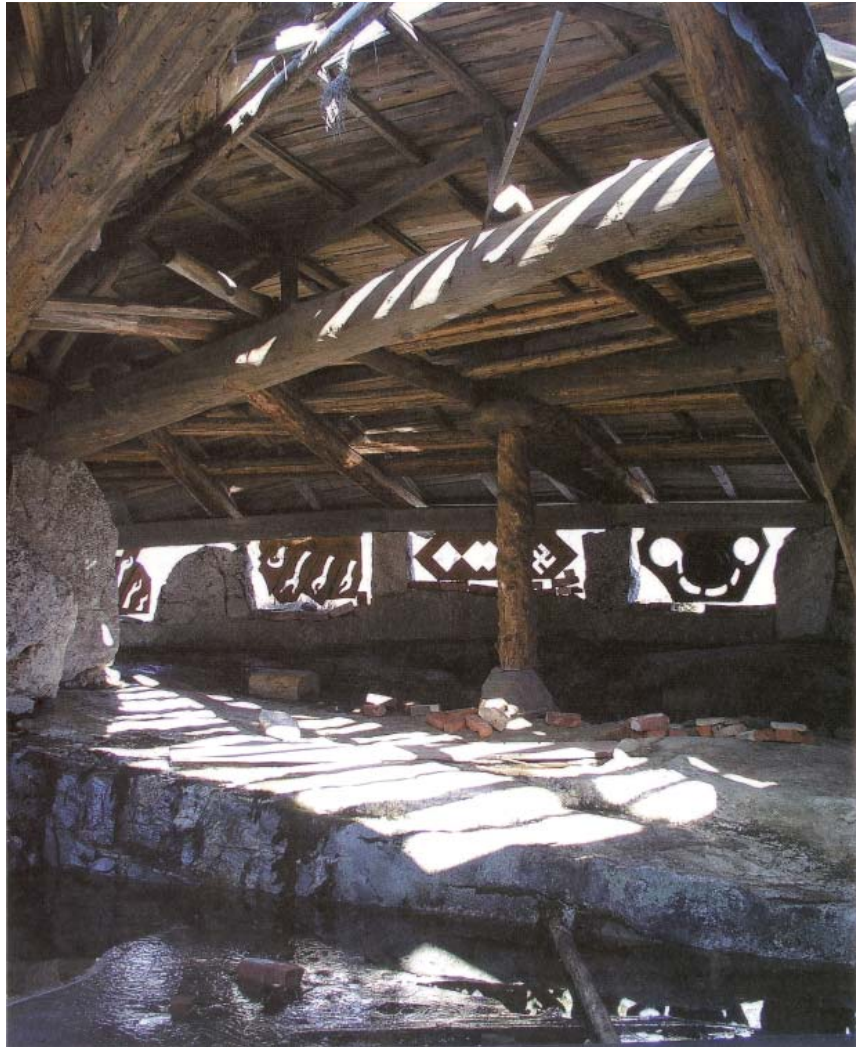
¹⁵⁴ Ateneumin taidemuseo & Valtion taidemuseo 2009. P.228. "*Vaihtoehdot rakentamassa*" by Ikkala, Marja-Leena. In the plan of 1985.

and healing in the hill called Puhkionkallio in Kaustinen, where is historically a place of healing power for retreat. To link the history of the site and the function of the building, the Kalevala was adopted as a main theme of the place. Building construction was launched in 1984 and was processed over years. Under participation of many local collaborators, this village completed with four buildings; the main building, a carpenters workshop, a smithy and a sauna, in which different interpretations were applied.¹⁵¹

The main building enshrining the highest point of the hill is outstanding with its organic roof shape. It is not a copy of organism but adapting to natural principle of organic creature. This curving roof with shallow ridge allows people to climb up to view magnificent landscape spreads below, as if they became a golden eagle in the myth. On the other hand, the carpenter's workshop as a place of making furnitures, windows and doors for Pauanne was inspired by caprice Lemminkäinen. The entrance door in the corner of the building refers his journey during which he enters the main hall of a house of Pohjola through the corner¹⁵². Smithy, where all the iron works for Pauanne have done, also adapts another metaphor of the Kalevala. The creation of iron, treated as a greatly significant issue in the epic and myth, is therefore a place where a magic is performed, as a smith Ilmarinen forged key objects of the story, such as a symbol of wealth Sampo, the heavens, a golden maiden and the sun and the moon. Similarly the pine trees growing on the peat roof of smithy is conceivable to represent a huge tree reaches to the heaven in the Kalevala. The last building, savusauna (smoke sauna), including treatment rooms for folk healers, is interpretation of the poetic world rather than the Kalevala itself. The ground floor of the sauna room allows the rain and the melted water running on the floor, which creates a cloud of steam in a certain time of the spring. The bathers can enjoy the traditional sauna experience in the mood of poetic world.¹⁵³

As all are mentioned above, this village is composed by various expressions, inspired by the history of the place, relation to the nature, characters or scenes in the epic and poetic metaphors. There was even extra idea that buildings and spaces were to collaborate with art works related to the Kalevala in order to produce atmosphere, although it was finally not accomplished¹⁵⁴. It seems that the village will be chaotic place if such a lot of themes are applied at the same time, however it is not in the case. First reason is that only one or at most a few themes are adopted into one building, therefore each place specifically keeps

Figure 3.32. Roof of main building of Pauanne. View from the roof of main building.



¹⁵⁵ Ateneumin taidemuseo & Valtion taidemuseo 2009. P.227. *"Vaihtoehtoa rakentamassa"* by Ikkala, Marja-Leena. In the words of Tapani Hietalahti in 1988.

an individual concept. One travels among multiple themes of mythology as he moves from one building to another in the village, so that the entire experience of the place results in the impression of the Kalevala. Another reason is that all wooden materials utilised in the whole building constructions came from the neighbourhood, so as to make the village unified and familiar to the region. These factors organise those incoherent expressions into one village. Thus, the atmosphere of the mythology is expressed not by one building but by the village area. Cooperation between architecture and the area create environmental expression here.

*"Pauanne is linked with a whole way of life, choice of occupation, change in values, distinctive culture, ecology, a 'return to the land', and other things that will give tourism a new profundity."*¹⁵⁵ As its name Pauanne, means 'supreme being' in the Kalevala, and as many locals joined in this project, this village has its root deep in the land here, so the Kalevala does in Finland.

Mythology, architecture and human beings

Originating from the ancient spells, songs and poems, mythology has been cultivated by deep-rooting in folk notions. It fundamentally contains historical facts, religious views and nature worship, therefore it has often been an object of expressive motif in art and architecture. It is evident in the case of the Kalevala. The tale includes lots of poetic elements and ancient folklore which embodies basic ideas on the origin of Finns and the nature. Accordingly, most of the Kalevala art apply the theme from the myth as a consequence of pursuit of Finnish authenticity. In addition, considering from the social situation of time, the interest in native mythology is more or less influenced by the movement of the age and enthusiasm for national identity. The Karelianism, cultural phenomenon happened around Finnish independence, is a good illustration of it. When a mythological motif leaves home to other regions or countries, it is then presented as a symbol of the locality.

Mythology is primarily a thing far from physical properties of architecture. Mythological expression is occasionally capable of resulting in being vague in physical spatial design, which receives human daily deeds as a base of life. The above-mentioned cases show how architects have tackled this aspect. Some

Figure 3.33. Interior of sauna at Pauanne.



Figure 3.34. Akseli Gallen-Kallera drawing fresco on the ceiling in the entrance hall of National Museum of Finland.

applied a definite form to create the narrative world under ocular supremacy. Some provides para-experience of a tale and some designs the atmosphere of it by turning the vagueness to advantage. Mythology in architecture is thus understood, at times specifically with details, at times ambiguously, relying on individual interpretations through one's perception. Above case study shows the essence of design, that is to say, mythological notion should be harmonised in proper proportion with every potential context; surrounding environment, use of the building, history of the place, human deeds and anything. Otherwise, building becomes isolated from place as an extraneous element or mythical theme gets weak behind other factors. Various things harmonize, intermingle and coexist in architecture. Hence, appropriate interaction of several contexts broadens the range of spatial experience.

Differing from other expression, architecture ropes human mind and body into the deeds¹⁵⁶. In other words, notional expression and spatial atmosphere in architecture reach the conclusion through bodily experience and perception. Architecture has transformed towards its entire organism by continuity of illusory appearance as it is¹⁵⁷. Namely, composition of spatial identity occurs in temporal phenomenon by the union of individual elements. Intervention of vernacular tale to it functions as a spice adding strong site specificity on expression.

According to Travis Price, the flow of cultural homogenization causes a creeping loss of authenticity across the built world¹⁵⁸. World-wide internationalization creates anxiety over the monotony of culture and fear of loss of own home, extinguishing the identity of own origin. This is exactly one of prompts to have brought Kalerianism in Finland. Regional authenticity and vernacular specificity evokes pride in their origin.

Holding own long history and vagueness on oral tradition, mythology has been alive at the place, elusively yet indeed. Mythic axis in architecture distils and exaggerates essential elements of a tale and makes deep relations with present human life. Humanism revives there. Architecture builds human horizon in the primitive world and people perceive the world through architecture. When human beings, mythology and architecture unite, they take root in the place more deeply. Consequently, people perceive its site-specific atmosphere there, interacting with indigenous notion. Thus, mythological architecture profoundly connects human body with place.

¹⁵⁶ Kawai. Theory from Shusaku Arakawa in a conversation with Hiromi Fujii. Pp.40-41.

¹⁵⁷ Maruyama 2002.

¹⁵⁸ Price. "Spirit of place".



Chapter 4. **Kalevala Sauna**

Sauna

4-1. Bathing Culture



¹⁵⁹ Japanilaisen Kulttuurin Ystävät ry (1997). Helamaa, Erkki. *“Maailman Kylvyt”*. Pp.6-9.

¹⁶⁰ The Building Information Foundation RTS (2014). Laaksonen, Pekka. *“The sauna and the Finns”*. P.5.

Sauna symbolizes the identity of Finland. It has stayed in a core of the Finnish culture as a place of daily routines, rituals, purification and health advancement. Nowadays it still remains one of the national representation having attracted both Finns and foreign visitors over centuries.

Similarly to Finnish sauna, the sweating bath playing an important key in native life, there is simultaneously a variety of bathing cultures all over the world. Ty falluis in Ireland and Temascal of Mexican Indian utilise piles of stones or bricks as main structure to retain the heat inside, while Inipi of North American Indian has tent style for shamanistic rituals. Islamic culture invented their own bathing style, for example Hamam in Turkey has facilities of both water bathing and steam sauna. Among water bathing culture, public bath in the Ancient Rome is widely popular with its leisure property of health resorts. On the other hand, in the East, bathing is a part of religious austerities, exemplified in water bath in India.¹⁵⁹ Frequently compared to Finnish sauna, Japanese Furo has strong commonalities to it. This hot-water bathing culture has long history in stormy social phenomena, yet remains highly popular, deeply rooted in daily life, in cultural tradition and in health treatments. Private bath in each housing is crucial as well as communal baths and hot springs in the public, likewise private and public saunas in Finland.

Bathing culture is world-widely prevailed. People lay themselves in the heat or the water to seek physical and psychological refreshment with various purposes; purification, religious rituals, health treatments or social meeting. Among those different traditions, sauna in Finland comparatively keeps its significance in the national identities. It clearly proved with the number of it in the country. Some 1.7 million saunas are currently in active use, that is, one sauna for every three Finns¹⁶⁰. Sauna is thus a thing to be crucial when speaking Finland, and so the following design process applies it as a place of the national mythic expression.

Figure 4.1. A man washing himself in sauna.

Sauna

4-2. History of Sauna in Finland



Figure 4.2. Acerbi Giuseppe. "Suomalainen sauna". 1804. Finnish sauna bathers from foreigner's view.

The origin of sauna in Finland

Concerning about the origin of Finno-Ugric sauna, there are various views advocated by researchers. In the theory on the most old estimated birth of sweat bath, it is assumed that primitive saunas existed in Finland already six or seven thousands years ago during the Stone Age. Huge sized pit hearths, found with the charred insulating layer, is obviously exceptional for usual dwellings of the era, therefore archaeologists consider them saunas. A researcher urges that it has some 3,500-year history regarding to the etymology of the word sauna, while another assumes that the bathing culture reached Finland with the arrival of the first Finnish settlers around two thousands years ago.¹⁶¹ In any cases, Finnish sauna surely had its initial form already in the ancient era and has developed along the social movements for thousands years.

Primitive Finno-Ugric sauna traditionally applied pit dwelling style, whose low half is hidden under the ground with only appearance of roof covered by the soil and grass. It is said to be probable that technical development of corner-joined log construction let saunas appear on the ground, although there were many different theories advocated by experts. This prototype of current Finnish sauna is confirmed already 1,500 years ago, consequently having the longest history of any kinds of sauna existing today¹⁶².

Defamatory tide against sauna

In eighteen century, sauna remained its original form as a single individual building, simultaneously some were unified into houses. Modest public saunas were documented in this time.¹⁶³ However this century became a hard period to sauna and its bathers.

In European countries, popular sweat baths from medieval times commenced disappearing in eighteen century under coercion by churches, economists' criticism of a waste of wood, and misunderstanding in venereal infection by doctors. Defamations of bathing was not an exceptional in Finland. Other countries keenly attacked their culture with assumptions that sauna seriously aggravates the health. Moreover, their tradition was abused as eccentric vicious custom to lead children to the death, as if their mothers desire it.¹⁶⁴ In fact, number of bathers in public sauna dropped around the year 1765 in Helsinki due to spread of disease and morality against the custom of bath shared with both gender to-

¹⁶¹ The Building Information Foundation RTS (2014). Helamaa, Erkki. *"The Historical Development of the Sauna"*. Pp.9-10.

¹⁶² Japanilaisen Kulttuurin Ystävät ry (1997). Helamaa, Erkki. *"Saunan Historia"*. Pp.54-55.

¹⁶³ Pentikäinen (2001). Jetsonen, Jari. *"The Rise and Disappearance of the Public Sauna in Helsinki"*. P.46.

¹⁶⁴ Numajiri (1992). Pp.30-31.



Figure 4.3. Cupping in Kotiharjun sauna.

¹⁶⁵ Pentikäinen (2001). Jetsonen, Jari. “The Rise and Disappearance of the Public Sauna in Helsinki”. P.46.

¹⁶⁶ Pentikäinen (2001). Jetsonen, Jari. “The Rise and Disappearance of the Public Sauna in Helsinki”. P.47.

¹⁶⁷ Pentikäinen (2001). Jetsonen, Jari. “The Rise and Disappearance of the Public Sauna in Helsinki”. P.47.

¹⁶⁸ Japanilaisen Kulttuurin Ystävät ry (1997). Helamaa, Erkki. “Suomalainen Sauna”. Pp.44-47.

¹⁶⁹ The Building Information Foundation RTS (2014). Helamaa, Erkki. “The Historical Development of the Sauna”. Pp.22-23.

¹⁷⁰ Pentikäinen (2001). Jetsonen, Jari. “The Rise and Disappearance of the Public Sauna in Helsinki”. P.48.

¹⁷¹ Pentikäinen (2001). Jetsonen, Jari. “The Rise and Disappearance of the Public Sauna in Helsinki”. P.48.

gether¹⁶⁵.

The fire occurred in Turku in 1827 brought a great impact on bath culture. Huge number of immigrants from Turku arrived in Helsinki with bath tradition flourished in the Western coastal towns. Consequently Helsinki grew to be one of major spa cities in the Baltic area, promoted by improvement of steamship lines which brought many Russian guests. Despite this positive phenomenon, spa declined during decades from 1840’s because of cholera epidemics and the Crimean War.¹⁶⁶

Sauna in turbulence

Behind a variety of defamatory phenomena, sauna had never lost its firm position in Finnish life. For example in Helsinki in 1890’s, after the serious decline of spa, there were still seventy public saunas or baths exist¹⁶⁷. In the middle of the nineteenth century, a new type of sauna stove invented, which allows smoke to go out of the building directly through a chimney, retaining the heat inside. The appearance of it forwarded the sauna development; sauna widely spread not only in suburbs but also to the city.¹⁶⁸

Public sauna rose its meaning in city life according to commencement of the apartment construction without own saunas for individuals in early twentieth century. At that time, sauna was not only the place for bathing; well-equipped ones offered masseurs, “cupping” or blood-letters, and even chiropractors, some of which still remains in old public saunas nowadays. It was during this period that some first-class public saunas started having two departments separated for men and women.¹⁶⁹ In 1939, 122 public saunas has recorded in Helsinki¹⁷⁰.

While sauna had seemingly rebuilt its social position, the quality of them conceivably dropped to the lowest level in its long history due to poor construction and citizens’ unconcern for it under the Great Depression in 1930’s. However, the Second World War ironically stopped a decay of public sauna. Rationing regulations caused the shortage of hot water for indivisual households, yet not seriously restricted for public saunas.¹⁷¹ People gathered there to seek only recreation under severe affair.

Not only in the general life, sauna also became a vital amusement in military

scenes. Finnish troops prepared the sauna with special stove and tent for the purpose of louse extermination as well as of entertainments for the army. It was a crucial event to elevate the fighting spirits of soldiers in battlefields.¹⁷²

The termination of the war brought the industrial production of electric sauna stove, whose prototype had already been seen in 1930's¹⁷³. This flexible product without chimney eliminated restrictions on stove construction, accordingly sauna rapidly prevailed in various places: swimming pools, sport centres, hotels and office buildings. At the same time, block saunas appeared in residential buildings, being in use for residences with advanced reserved schedule¹⁷⁴.

Rediscovery of significance of the sauna

The development of electric stove, in one hand, spread the sauna in private or semi-private use. However, on the other hand, number of public sauna decreased. In 1940's, over thirty public saunas has reached their closures in Helsinki¹⁷⁵ conceivably due to the Second World War and the prevalence of private saunas. Under the undesirable situation, some movements for sauna preservation took place. In 1937, "Suomen Saunaseura", The Finnish Sauna Society, was founded in order to foster the heritage of the national bath¹⁷⁶, followed by the Union of Finnish Business Saunas in 1943. In 1940's, a school sauna experiment has been proposed so as to rise the popularity of bathing culture. Saunas were built next to schools for both pupils and public, although the project has stayed modest.¹⁹ The Helsinki Olympic, held in 1952, also gave subsidiary impact on advancement in reconsideration of sauna. In Helsinki in 1950, eighty-seven public saunas and some three thousands house saunas were documented.¹⁷⁷

Grave crisis over continuance of public sauna

As electricity-heated sauna has been more and more popular and has increased the number of it, public sauna has disappeared from the city. It became the general tide during decades from 1950's, when apartments started applying the traditional features of single family houses¹⁷⁸. This trend reached its peak in 1980's, accelerating the decline of public bath. As a comparative issue, Japanese bath is possibly referred to, Sento, public hot-water bath, in Tokyo followed highly similar phenomenon, that the development of private housing bath occurred the serious decrease of ones in public. Common features in both countries found in

¹⁷² Numajiri (1992). P.32.

¹⁷³ Pentikäinen (2001). Jetsonen, Jari. *"The Rise and Disappearance of the Public Sauna in Helsinki"*. P.49.

¹⁷⁴ The Building Information Foundation RTS (2014). Helamaa, Erkki. *"The Historical Development of the Sauna"*. Pp.24-25.

¹⁷⁵ Pentikäinen (2001). Jetsonen, Jari. *"The Rise and Disappearance of the Public Sauna in Helsinki"*. P.49.

¹⁷⁶ Suomen Saunaseura.

¹⁷⁷ Pentikäinen (2001). Jetsonen, Jari. *"The Rise and Disappearance of the Public Sauna in Helsinki"*. Pp.48-49.

¹⁷⁸ The Building Information Foundation RTS (2014). Helamaa, Erkki. *"The Historical Development of the Sauna"*. P.25.



Figure 4.4. Akseli Gallen-Kallela. "Saunassa". 1889.

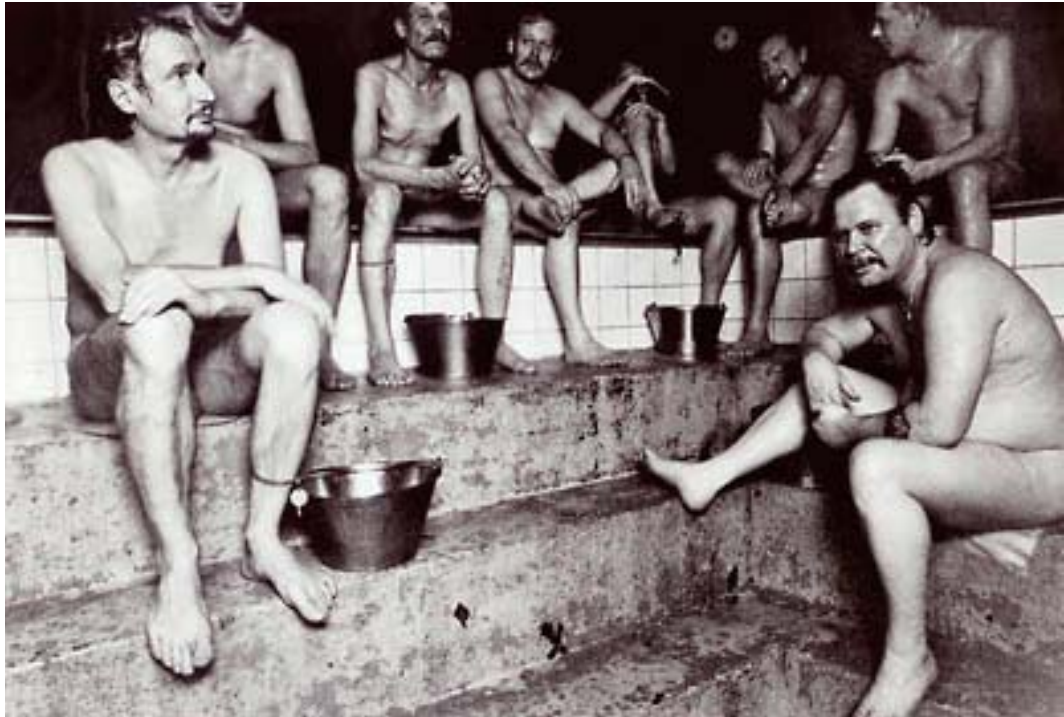


Figure 4.5. Sauna bathers in Kotiharjun sauna, Helsinki.

benefits in individual bath, adjusting the change of the rhythm and the way of the present life.

Still nowadays, private saunas remain significant in Finnish life. Most of Finns bathe in the housing sauna once in a week or more, while they enjoy the ones with lake swimming in the summer cottages. Sauna is counted to 1.7 millions in Finland today, while it was some five hundred thousands in 1935, approximately one million in 1975, and around 1.4 million in 1986¹⁷⁹.

By contrast, public saunas has continue disappearing. For example in Helsinki, over one hundred saunas has closed their history during past fifty years, and only three of the old exist now; only one of them, Kotiharjun Sauna, keeps its traditional heated style by wood. To confront its crisis, the City of Culture Foundation and the Ministry of Education finally took part in supporting, resulted in the repair of Kotiharjun Sauna in 1999.¹⁸⁰ On the other hand, Rajaportin sauna, the oldest sauna in Finland built in 1906 in Tampere, has been alive there by adapting to the social tide. The sauna behind separated dressing rooms for men and women had been originally build to be shared by both genders, later divided into two sections for each with a textile curtain. Now a masonry wall completely splits the whole area in two departments under the morality against the old bathing tradition.¹⁸¹

Sauna in the present life

Meaning of the public sauna has changed. In present days when original bathing purpose is fulfilled at home, people seek something different in public saunas. One visits old saunas to feel the indigenous national tradition while another looks for the entertainment in new style. Some visit different saunas for refreshment while some enjoy one particular sauna as social meeting place in a routine. Despite the eventual decline of old sauna, new public saunas have started the new history. In case of Tampere, Kaupinojan sauna was built in 1977 in the forested shore of Näsijärvi-lake¹⁸², following Rauhaniemen kansankylpylä started heating its stoves in 1929 in current place, the suburb shore of the same lake¹⁸³. Those two remain major among citizens, giving opportunity to appreciate sauna culture with swimming in the natural lake even during winter time.

In 2000's, latest saunas have commenced the new bathing entertainments. Several saunas have been built in cities with own strong characteristics. Some

¹⁷⁹ Pentikäinen (2001). Helamaa, Erkki. *"The History of Sauna and the Stove"*. P.44.

¹⁸⁰ Pentikäinen (2001). Jetsonen, Jari. *"The Rise and Disappearance of the Public Sauna in Helsinki"*. P.49.

¹⁸¹ The Building Information Foundation RTS (2014). Helamaa, Erkki. *"The Historical Development of the Sauna"*. Pp.22-23.

¹⁸² Tampereen Talviuimarit.

¹⁸³ Rauhaniemen kansankylpylä.

focuses on more cultural aspects as a place for social meeting of the region, while some are conjoined with clubs or bars for younger generations. In some cities, unique sauna events are annually held, partly for promoting the authentic national tradition and partly for pure pleasure.

Old town saunas have profoundly attracted bathers with its long history, the latest public saunas just started building new bathing pleasure, and various festivals relevant to it deepen the national interest in it. Many different kinds of sauna coexist in Finland today and the meaning of them is wealthy in variety. Therefore it is vital to reconsider the substances of bath in the present society when building new sauna; if it will supply a new value to the neighbours or if it consistently offers deep nostalgia for Finnishness. Sauna has been an identity of Finland since the ancient time. It is consequently said to be one of national treasures, hence its significance have to be succeeded to the next generation with its national authenticity in the proper development according to the change of time.



Figure 4.6. An old car transformed in a mobile sauna.

Sauna

4-3. Types of Sauna

Ancient sauna



Figure 4.7. Frame structure of ritual sauna. Muurame sauna museum.

According to the research by Sakari Pälsi, a primitive form of sauna conceivably existed already in the Stone Age. The structure was simple. A pit hearth, bigger than the ones for usual dwellings, warms up the stone on the top of it, and tent-style structure retains the emitted heat, for example with reindeer skin. Traces of the water vessels is also found near the fire place in some cases.¹⁸⁴

¹⁸⁴ Pentikäinen (2001). Hermaa, Erkki. "The History of the Sauna and the Stove". P.38.

Maasauna



Figure 4.8. Maasauna.

The origin of the current Finnish sauna is conceived to appear in the earlier Bronze Age. The native form was half hidden under the ground with the top part built with corner-joining log structure, which the name Maasauna, the pit sauna, derived from. The roof was entirely covered by the soil and the grass, so that the only visible sign was the smoke. The stove was composed of the piles of stones.¹⁸⁵

¹⁸⁵ Japanilaisen Kulttuurin Ystävät ry (1997). Helamaa, Erkki. "Saunan Historia". Pp.54-55.

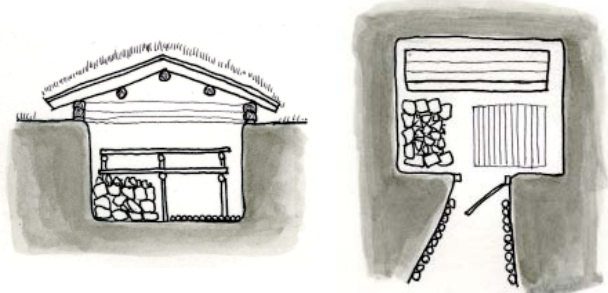


Figure 4.9. Section and plan of Maasauna.

Savusauna



Figure 4.10. Old Savusauna with extra space for household chores. Muurame Sauna Museum.

The development of construction techniques allowed sauna to appear completely on the ground. Savusauna, smoke sauna, thus began its longest history among various saunas in Finland. Since the stove was built without any chimney, the smoke, which fully fills the indoor during stones have been heated, accordingly has to be released before sauna bathing. Sauna building is basically built separately from the main house and any other accompanying parts even today, due to official recognition as a fire hazard. Savusauna traditionally has very unique atmosphere with its darkness, smell of smoke and nostalgic bating method, consequently it remains in deep-rooted favour among bathers even today.

Each of the regions had individual style of savusauna according to the usage of it in need in own lifestyle. In East Finland, sauna was relatively small, approximately three metres square in area and 2.5 metres in height from the ground, or even smaller in North Finland. The need of sauna was basically only for bathing in those regions. Therefore a small stove was sufficient.¹⁸⁶

In Häme, on the other hand, sauna was a place for various household chores as well as for the original purpose of bathing. Therefore the place needed to be large enough to work in it; approximately six metres square and more than three metres high. Regionally, huge ones even reached around fifty square metres in area or over four metres in height. The stove was accordingly big for food preparation which requires long-time heating of large indoor space.¹⁸⁷

In West Finland, size of sauna was varied depending on the needs; some are only for bath while other were also for houseworks. The southern part used large and regular-shaped stove while the northern part built them in small and irregular shape with stone with the fire opening to the rear wall. In Satakunta, brick stove was found.¹⁸⁸

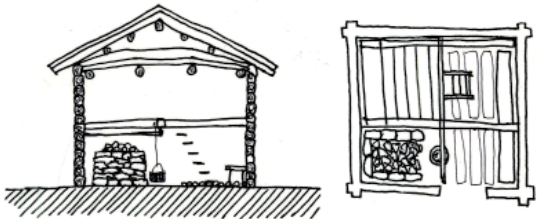


Figure 4.11. Section and plan of savusauna.

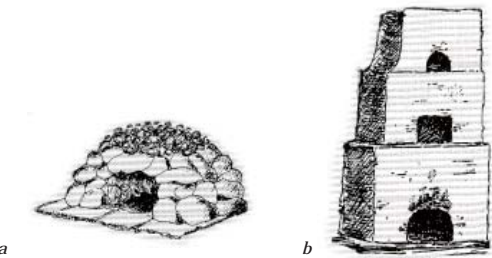


Figure 4.12. Different types of Kiuas (sauna stove). a) Primitive chimney-less stove. b) Three-story stove utilised in West Finland and Häme.

^{186, 187, 188} The Building Information Foundation RTS (2014). Helamaa, Erkki. "The Historical Development of the Sauna". Pp.1-165.

Kalasauna



Figure 4.13. Kalasauna on the shore of Märajärvi. 1940.

While primary smoke saunas culturally existed near inland farmlands with water well beside it, Kalasauna exceptionally situated on the shore. This sauna, literally fish-sauna, functioned as a temporary homebase of seasonal events for fishers, fulfilling their needs: sauna bathing, fish drying and residing. Despite the location, there was no tradition to swim during bathing process in the ancient time¹⁸⁹.

¹⁸⁹ Japanilaisen Kulttuurin Ystävät ry (1997). Fredrikson, Erkki. “Rantasau-na”. Pp.58-60.

Flue-equipped sauna



Figure 4.14. An old sauna with a fuel in Saarenmäki in Karelia. 1920-30.

The introduction of flue in the middle of the nineteenth century dramatically bought the first progressive innovation in the history of sauna. The chimney system, discharging the smoke directly to outside, allowed sauna to be built in the yards in the city, eventually conjoined to the accompanying facilities or other dwelling parts. The great reduction of the danger of fire widely spread the sauna especially in densely built areas. This style continuously remain in the mainstream of Finnish bathing culture until today with a variety in fuel: wood, gas or electricity.

Yard sauna



Figure 4.15. Sauna in the back yard in Suomenlinna, Helsinki.

According to the successful fuel invention, sauna construction commenced to be allowed in the yards in city after 1910’s¹⁹⁰. This positive phenomenon accordingly gave to urban residents great opportunities to have individual sauna just around own house. Although sauna eventually became no longer a separated building after decades due to technical developments, the yard sauna has been the most common style still nowadays especially for rural dwellings and summer cottages.

¹⁹⁰ Japanilaisen Kulttuurin Ystävät ry (1997). Helamaa, Erkki. “Saunan Historia”. Pp.54-57.

Rantasauna



Figure 4.16. Village rantasauna in Karelia. 1938.

The saunas built at the shore are categorised into Rantasauna, started to prevail in the early twentieth century¹⁹¹. Since it provides the swimming alternative to return to the nature during bathing cycle, it has won the popular appeal among a wide range of generations as a leisure refreshment.

¹⁹¹ Japanilaisen Kulttuurin Ystävät ry (1997). Fredrikson, Erkki. “Rantasau-na”. Pp.60-61.

Tent sauna



Figure 4.17. A tent sauna at Sauna-ajot in Teuva.

Simple sauna is possibly built with a small portable stove and a tent, although it is rarely seen. This mobile style is comparatively modest yet popular in the temporary use for outdoor delight.

Electric sauna



Figure 4.18. Sauna in a day care centre by Raili and Reima Pietilä. Pori. 1984.

To Finns in the present time, it is probable that the most familiar is the electric sauna. After the commencement of industrial production of electrical stove in the late 1940’s, this chimney-less sauna rapidly spread to any kind of building: dwellings, office buildings, sports centres, swimming halls and so on¹⁹². Block saunas were heated for the residents according to the set schedule, simultaneously own private saunas started appearing individually in each apartment as well as row houses. Compared to the traditional wooden heating system, electricity requires much less special cares therefore sauna preparation became a more easy and fast task. Since most Finns warm up saunas at least once in a week or more, this simple method consequently suits to the modern lifestyle, fulfilling enough the basic demand of bath.

¹⁹² The Building Information Foundation RTS (2014). Helamaa, Erkki. “The Historical Development of the Sauna”. Pp.23-24.

Sauna

4-4. Public Saunas Today

Yard sauna - *Rajaportin sauna*



Figure 4.19. Interior view of Rajaportin sauna today. The stairs connect the washing space in the lower level and the sauna above it. The wall on the right was built later to divide the sauna into two department.

Rajaportin sauna, the oldest public sauna currently existing in Finland, was built in Tampere in 1906. Although it had been slightly transformed from the original¹⁹³, it still displays the nostalgia for indigenous bathing. The original room form is exhibited in Amuri Museum of Workers' Housing, showing the shared sauna for both genders with separated dressing rooms for men and women. Today whole area is divided completely in two departments for each genders, yet relics of initial sauna can be found in two-storied bathroom with sauna benches on upper floor and washing spaces below it.

¹⁹³ The Building Information Foundation RTS (2014). Helamaa, Erkki. "The Historical Development of the Sauna". P.22.

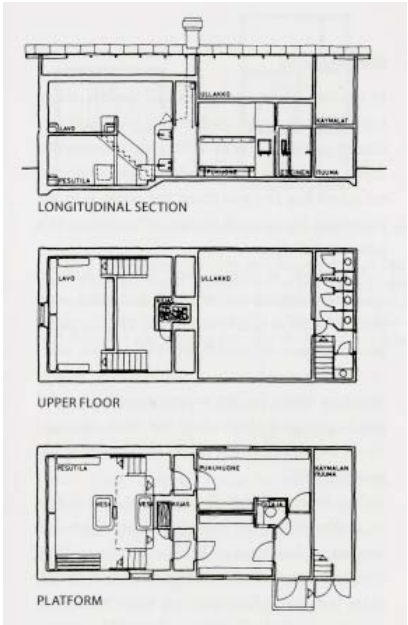


Figure 4.20. Initial section and plans.

Block sauna - *Kotiharjun sauna*



Figure 4.21. Sauna bathers chilling on the street in Helsinki, in front of Kotiharjun sauna.

There are three so-called old saunas remain in Helsinki, including only wooden-heated one, Kotiharjun sauna¹⁹⁴. This family-owned sauna started warming its stove in 1928¹⁹⁵. Similarly to Rajaportin sauna, it represents the genuine sauna culture in traditional mood and services; masseurs and washing ladies are still available. Because of its location, settled in ground floors in a residential building in the capital city, typical features of block sauna is obviously seen. Spaces for men and women are completely separated on different floors. The bathers chilling themselves on the front street with only a towel wrapping the body stands for figurative scene of native Finnishness.

¹⁹⁴ Pentikäinen (2001). Jetsonen, Jari. "The Rise and Disappearance of the Public Sauna in Helsinki". P.52.

¹⁹⁵ Kotiharjun Sauna Oy.

Rantasauna- *Kaupinoja sauna*



Figure 4.22. Kaupinoja sauna on the forested shore of Näsijärvi offers the lake swimming even during the winter.

Visiting a public rantasauna is one option to enjoy sauna with swimming since many of private baths exist in a distance from the shore. It is said to be a process for human to return to the nature in the feeling of wildness: warming own body in the heat from stones and the wood and cooling oneself in the natural water. The blood freshly circulates throughout body during the bathing process in excessively different temperatures, letting people feel own body in natural contexts. Kaupinoja sauna in Tampere exemplifies the initial meanings of rantasauna, welcoming guests in the forested shore towards the lake and offering the swimming opportunity all year around. Even in winter time, the bathers dip themselves in the lake through Avanto, a hole in the ice, the very Finnish way of admiring the pure nature.

Sauna for fun - *Teuva Sauna-ajot*



Figure 4.23. Plenty of unique creative saunas gather in Teuva every summer for Sauna-ajot.

Sauna is a source of joy. Sauna is an entertainment. To eager sauna bathers, seeking a new possibility of national bath is one of essential tasks for more profound pleasure. Every summer, more than fifty unique own-built and own-designed mobile saunas gather for Sauna-ajot in Teuva¹⁹⁶ to celebrate the invaluable national culture. This is not only the case of sauna celebration; a variety of events regarding to bathing culture are held all over Finland every year. The festivities reveals the great passion of sauna lovers and the authentic delight of tradition.

¹⁹⁶ Teuvan sauna-ajot.

Sauna for autonomic culture - *Kulttuurisauna*



Figure 4.24. A courtyard of Kulttuurisauna. Designed by Nene Tsuboi and Tuomas Toivonen. 2013.

The purpose of visiting sauna is no longer limited to bathing itself. Kulttuurisauna, opened in 2013 in Helsinki, emphasises the cultural perspective of public bath. Saunas themselves follow the tradition that men and women separately bathe with naked. During sauna bathing, bathers chill themselves in an atrium, or in a courtyard facing to the Baltic Sea where they can dip into. The unique feature is a salon where lectures or meetings are occasionally held.¹⁹⁷ As its name “Kulttuurisauna” literally means “culture sauna”, the place emphasises the meaning of public sauna, functions as a cultural hub of the surrounding region.

¹⁹⁷ Tsuboi (2014).

Leisure sauna - *Löyly*

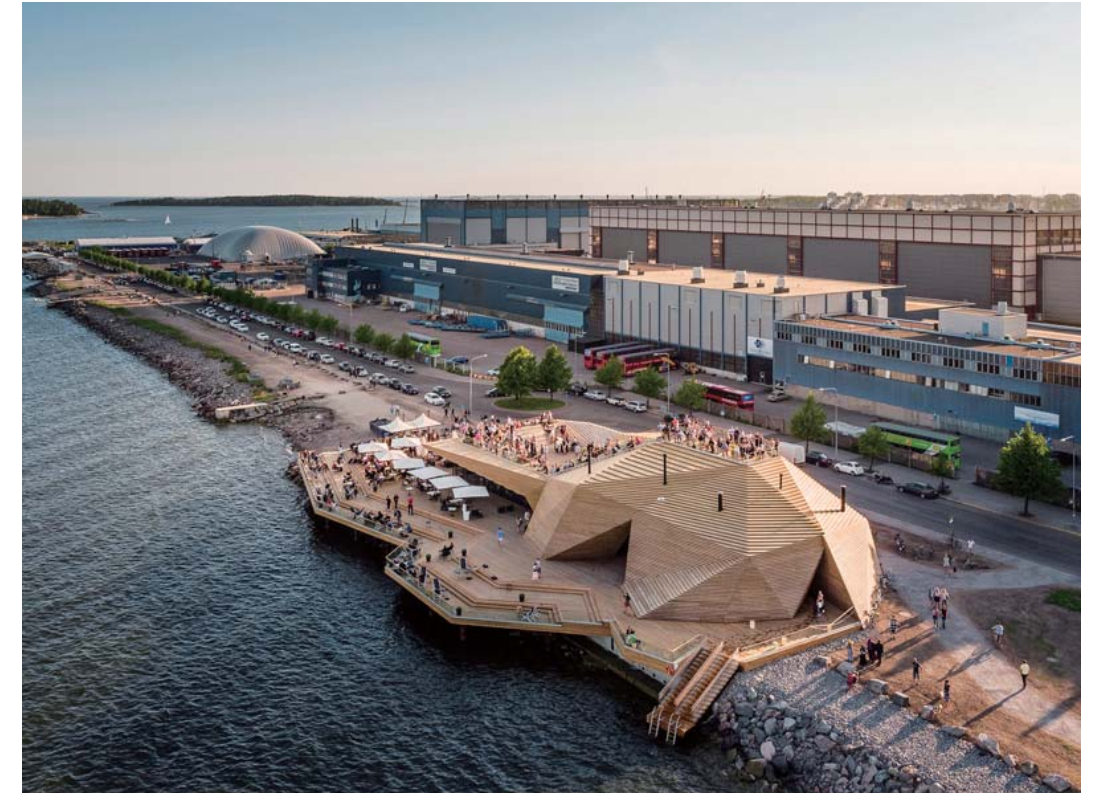


Figure 4.25. Sauna complex on the Baltic coastline, designed by Avanto Architects. 2016.

On the coastline of Hernesaari, a new public complex Löyly opened in 2016.¹⁹⁸ Conjoining two departments of saunas and a restaurant, an expansive undulating building modestly develops the area with new functions. Three different saunas, including a traditional smoke sauna, are possibly experienced in one visit. An accompanying restaurant and roof decks as well as terraces are partly opened to all the visitors, accordingly the bathing conduct naturally becomes a part of urban context. Differing from Kulttuurisauna referring the regional meaning of public sauna, this complex underlines the pleasure of traditional bath as an attraction relatively to tourists due to its location near a cruise ship harbour.

¹⁹⁸ Avanto Architects.

Sauna

4-5. Spirits of Sauna



Figure 4.26. Sauna bathing in old home smoke sauna.

Sauna in life, from birth to death

Sauna bathing is essentially a vital part of Finnish culture and genuine national identity. This is not figurative exaggerated words. Sauna traditionally represents life, that is to say, it had been indeed a centre of life from birth to death.

The very first experience of sauna was exactly the moment of birth. Finns were born primarily in sauna since it was the most proper place for childbirth in former times. The smoke during the bating process chars indoor to kill bacteria incidentally, owing to this, sauna was the most sanitary place in dwellings. The room is relatively warm, there are benches to lie down and warm water was easily prepared from the facility. In terms of religion, the belief in sauna as a holy place was also took into consideration.¹⁹⁹ Pregnant mothers slept in sauna for a few days before childbirth in rural areas, and thereafter, they stayed there for a while to be purified before returning to their everyday life.²⁰⁰

In ordinary days, sauna occasionally functioned not only for bathing but also for household chores. Meat was smoked, malt was soaked and dried, hemp and flax was processed, linen was washed, seed potatoes were sprouted, and tobacco was softened in the steam. In traditional Finnish wedding rituals, the girl's preparation has been done in sauna. After ablution of her hair, she plaits it, wears wife-cap on it, listened to the instruction of married life and ultimately becomes a bride.²⁰¹ When building a new house, sauna was first raised for the reason of simple structure and the family lived there during the rest of construction phase²⁰².

In terms of bathing, sauna is an essential element in Finnish daily routine. As an adage says that the sauna is the poor man's hospital, its effective impact on our health is surprisingly huge. High temperature of steam awakes the primary physical faculty and sweating refreshes the body. Vihta, a birch whisk slaps repeatedly our body, advances the blood circulation. Finnish cupping or blood-letting custom possibly survived by sauna. The healers cured various ills in peace in sauna where they can concentrate enough in the old times. Traditionally said, there is only grave left to the patient if sauna, spirits and tar will not help.²⁰³

In the end of life, Finns came back to sauna. This hallowed bath turned into a ceremonial place to wash the corpse when it was carried in²⁰⁴. After purified the body, the dead starts off to the another world.

¹⁹⁹ Numajiri (1992). P.34.

²⁰⁰ The Building Information Foundation RTS (2014). Laaksonen, Pekka. *"The Sauna and the Finns"*. P.7.

²⁰¹ Pentikäinen (2001). P.33, P.41.

²⁰² Numajiri (1992). P.34.

²⁰³ The Building Information Foundation RTS (2014). Laaksonen, Pekka. *"The Sauna and the Finns"*. Pp.7-8.

²⁰⁴ Pentikäinen (2001). *"The Spirit of Löyly"*. P.33.

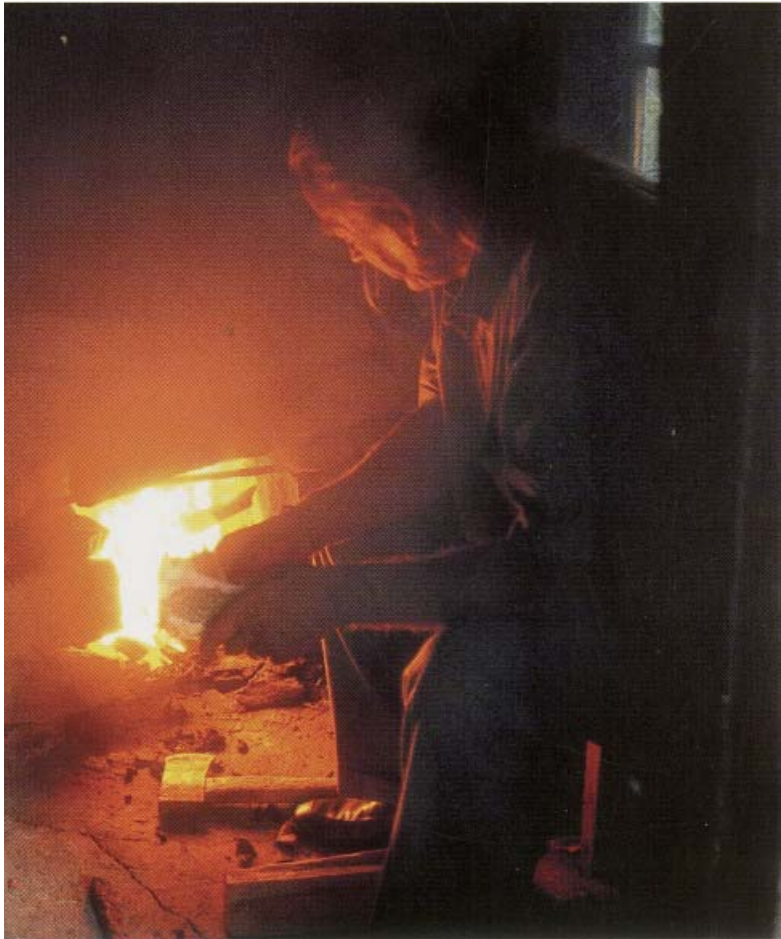


Figure 4.27. Preparation for sauna.

Thus Finns saw the first light in sauna and left this world to the hereafter from there. In the meantime, various life events and everyday chores took place there. Although most of those traditions were already lost, sauna remains vital in Finnish life. Even nowadays, most Finns bathe in sauna once or more times every week, traditionally on Saturdays. Offering sauna is one tradition to welcome guests, therefore politicians and businesspeople occasionally invite business partners for bathing²⁰⁵. Casting off the social status and courtesy with clothes, all becomes equal in the appearance as they were born. Bathing calmly releases people from their daily works, resulting in great refreshment in peace.

Spirits of sauna

In sauna, bathers should behave properly as if in a church; this old concept portrays the spiritual holiness of Finnish sauna. It is believed that Saunatonnttu, the sauna elf, lives in sauna so as to secure a sacred place. Since it loves being in peace with no bustle, Finns customarily bathe in silence. The old people regionally dispensed periodic rituals with sincere respect and awe of the spirit.²⁰⁶ Sauna stove was the most sacred among all the other fire places of the house, thereby the first person to kindle was chosen with great care.²⁰⁷

The reverence of sauna spirits was similarly important in terms of healing. In case anyone fell ill after bathing, the one was conceived to have failed at the appropriate greeting to them. The healer recited old incantations descended from ancient rites in order to cure disease. The oldest record regarding to a sauna healing was documented in 1678 in northern Finland.²⁰⁸

The turn to bathe for ancestors was reserved in turning points of the year: during Christmas, around New Year's day, at Shrovetide, at Easter, and the end of harvest season in the beginning of November. The water was thrown to the stove more than usual for the dead at those times. Sauna bath in annual events were rites to honour their ancestors and to exorcise the evil souls. Various folklores regarding to ceremonial sauna bathing have been passed down over generations regionally. For example, in Koivisto in Karelian Isthmus, the only smoke from sauna in the sky before the New Year's first sun is believed to be a sign of smooth work during the coming year.²⁰⁹

²⁰⁵ Numajiri (1992). P.42.

²⁰⁶ Numajiri (1992). P.40.

²⁰⁷ Pentikäinen (2001). *"The Spirit of Löyly"*. P.26, P.34.

²⁰⁸ Pentikäinen (2001). P.18, P.27.

²⁰⁹ Pentikäinen (2001). *"The Spirit of Löyly"*. Pp.28-30.

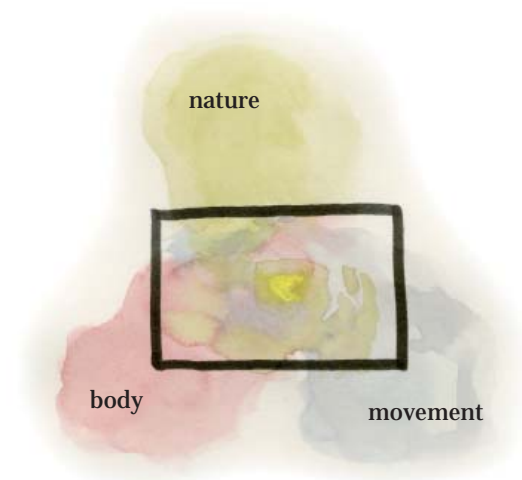


Figure 4.28. Interaction between nature, body and human movement forms the perceptual space.



Figure 4.29. Nature experienced differently in sauna.

Thus sauna primarily changed its function according to the life events: usually for bathing, at times for household chores, and occasionally for spiritual rituals. Sauna has always been beside Finns' life. The impregnable cultural position of sauna eventually ascribes to it. Most of the customs had already turned old-fashioned in the present days, yet leaves the mysterious impression in the national bathing tradition.

Nature in sauna

Fire burns wood to warm the stone on the stove which the water is thrown to. Watering produces the steam in an instant and the heat gently envelops the space. Person deeply breathes in the waves of the heat and feels the body awakes with Vihta, a birch whisk, slapping the skin in the darkness of the room.

Sauna is sometimes conceived a place of bathing ritual. The process starts in its preparation before bathing. Firewood is chopped, a fire is kindled, the water is drawn and vihta is made. The natural products of Finnish nature ritually turn into essential elements of bath. During preparation, the fire in the stove has to be taken care until the place gets ready for folk experience.

Through the appropriate process, the nature properly transforms in sauna: trees into firewood to create fire, rocks into sauna stones to emit the heat, the water into the steam to reaches the body, and tree branches into vihta to meet the body directly. Laying own body in the enclosed dark small building is the beginning of new encounter with another world of nature. All the natural elements are experienced differently from what they are in the wild and they eventually comes into our body as Löyly, the steam from sauna stone which historically conceived a steam of sauna spirits²¹⁰. Sauna is hence a consequence of nature worship of ancient Finns.

²¹⁰ Japanilaisen Kulttuurin Ystävät ry (1997). Helamaa, Erkki. "Suomalainen Sauna". Pp.46-49.

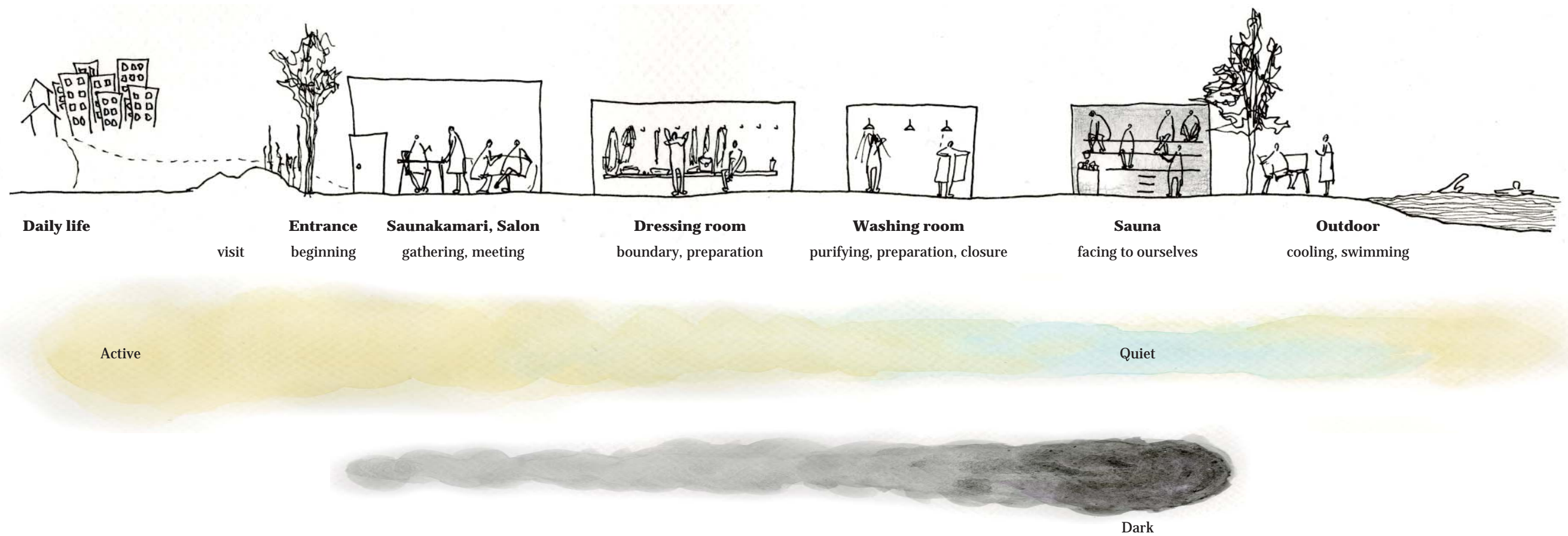


Figure 4.30. Process of sauna bathing in case of public sauna.

Sauna bathing follows several steps from preparation to closure. The flow of gradation leads bathers to deeper perceptual experience, simultaneously movements among places brings the depth of mutual communication between human, nature and tradition of Finland. Therefore the sauna bath often considered an indigenous ritual.

The sauna ritual starts already when preparing the stove. Firewood collection, kindling and the many-hour care of fire are all crucial stage of tradition. In case of public saunas, visiting sauna is the initial step. People leave where they usually live and travel to the place where the world is perceived with full bodily senses.

After arriving in front of sauna, a door is waiting for people to begin the authentic experience of Finland. One may go to saunakamari, a lobby or salon for gathering, before the next step, or might come later.

Dressing room is the place where people undress everything. Bathers leave their cloth as well as the social status and their backgrounds. It is the process to be naked both physically and mentally. Only the body and mind move on to the next place.

Washing is purifying. People flush the social fetters to be

what they really are. Water awakens the human body to get ready for following perceptual rituals.

Sauna, the place of genuine Finnishness, the place to feel the nature differently from what it is in the wildness, and the place of self-consciousness. One faces to oneself through pure bodily sense in spatial phenomena in the darkness, receiving the natural power into the body. The long history of cultural bath and a national identity are indeed alive here, providing the authentic experience of Finland.

Cooling the body is an essential step during sauna pro-

cess. The body rests in peace to get ready for another cycle. Sauna occasionally offers the possibility to swim in the nature, letting bathers be a part of environment. One faces to the wildness in contrast to sauna.

The process is repeated until the body satisfies. Movements between diverse perceptual factors give bathers various perspectives on awareness of own existence as well as on the world of nature simultaneously. This is exactly how the ancient tried to seek own existence in deep reverence for the nature. People thereafter wash the body to close the ritual and wear cloth to get ready to come back to the daily life in a refreshed mood.

Sauna

4-6. Sauna and Kalevala



Figure 4.31. Marina Takalo, a rune singer, healing an injured man in her smoke sauna.

Sauna in the Kalevala

Sauna, the Finnish indigenous bathing tradition, and the Kalevala, the national epic of Finland. Those two in totally different realms, however, have very significant commonalities. Both of them primarily originate in Finnish ancient life and has remained substantially elemental in national culture during their long history. Having deeply rooted to the native life over ages, they are now regarded to as national identities to represent the authentic Finnishness.

Relation between those two genuine culture is particularly interesting. Since the Kalevala derived from folk poetry, it frequently treats the narratives regarding to the sauna. In several poems, the characters utilises saunas for bathing as well as for any everyday household chores as old Finns did. In addition to the presentation of ordinal function, the epic reveals the conceptual perspectives on sauna in the old time. In the first poem referring bathing, a maiden Aino visit the forest in order to pick blanches for sauna preparation²¹¹. Collecting firewood, preparing birch whisks, drawing water from the lake and making fire for stove; they are all women’s tasks. The wedding instruction on married life clearly mentions that preparation of sauna is responsible on a bride²¹². The same poem simultaneously describes the danger of being attacked by wolf during night bathing, proving the fact that sauna was fundamentally an isolated building.

While the traditional roles of sauna in the native life was glimpsed, some spiritual notions are also revealed. For the Ilmarinen’s proposal preparation, sauna is warmed with the tree split by wind²¹³, similarly, healing incantation suggests the use of wood brought to the shore by water. In the old belief, such wood brought by natural power holds inner spirits than the ones chopped by an axe. The water for bathing is drawn from the lake and carried to sauna by being hidden in cloth to shun evil incantations. The vicious steam in the spell of bathing portrays the cloud of illness floating in the air, based on a folk notion²¹⁴. The most noteworthy part regarding to sauna is indeed the last poem where Marjatta gives birth to a boy in sauna. Referring to the fact that this poem is often regarded as a representation of the Virgin Mary and the birth of Jesus, this narrative alludes the religious significance of sauna.

It is said that the author of the Kalevala, Elias Lönnrot, was one of progenitors to underline the benefits of sauna bathing as a physician²¹⁵. The frequent appearance of sauna in the Kalevala conceivably proceed from the fact. However the

²¹¹ Poem 4.

²¹² Poem 23.

²¹³ Poem 18.

²¹⁴ Poem 45.

²¹⁵ Pentikäinen (2001). Walimaa, Susan E.. “The sauna and the Kalevala”.P.22.

poetry consequently displays the important roles of bathing in Finnish life in the old times and modestly reveals the unique indigenous perspectives of ancestors, eventuating in the mysterious world of mythology.

Kalevala in sauna

In one hand, the Kalevala refers to sauna throughout the epic. On the other hand, spatiality of sauna internally projects the commonalities to the mythology. The most significant is sincere reverence for the nature. As the mythic epic often refers to the nature as what people live together with profound relations and to what suggests them instruction of ways of life, so the nature and human physically communicate in sauna. Transforming own manners, natural elements fully fills the space to let human be conscious of its pure power as well as of existence of own body. This is the way how old Finns treated nature in deep respect and owe, that the Kalevala poems pays courteous attentions throughout the epic.

The experiential process of bathing deserves subsidiary mention. During sauna bath, people first undress to be their original appearance, feel their own bodily sense awaken in heat in the darkness, and chill themselves in peace, sometimes in abundant nature. The process is repeatedly carried until the body satisfies. Bathers leave from the daily routine works by taking the cloth off, therefore the bathing cycle is dispensed in a psychological distance from socialised life. Bathing process experienced from various directions as each spaces consist of different factors. As characters in the epic do, the bathers see the world in a variety of ways and recognize their own existence in diverse perspectives through sauna experience. Hence those two elemental cultures, the Kalevala and the sauna, build national identity in different field yet with some commonalities, revealing the genuine native worldview enshrines behind the Finnish authenticity.



Figure 4.32. Swimming in the winter lake during sauna bathing.

Kalevala Sauna



Figure 4.33. A bridge to Jalkasaari, where the Kaleva world is being unfolded.

Site analysis

4-7. Site in the City



Figure 4.34. Map of the site in the city of Tampere. 1:30000.

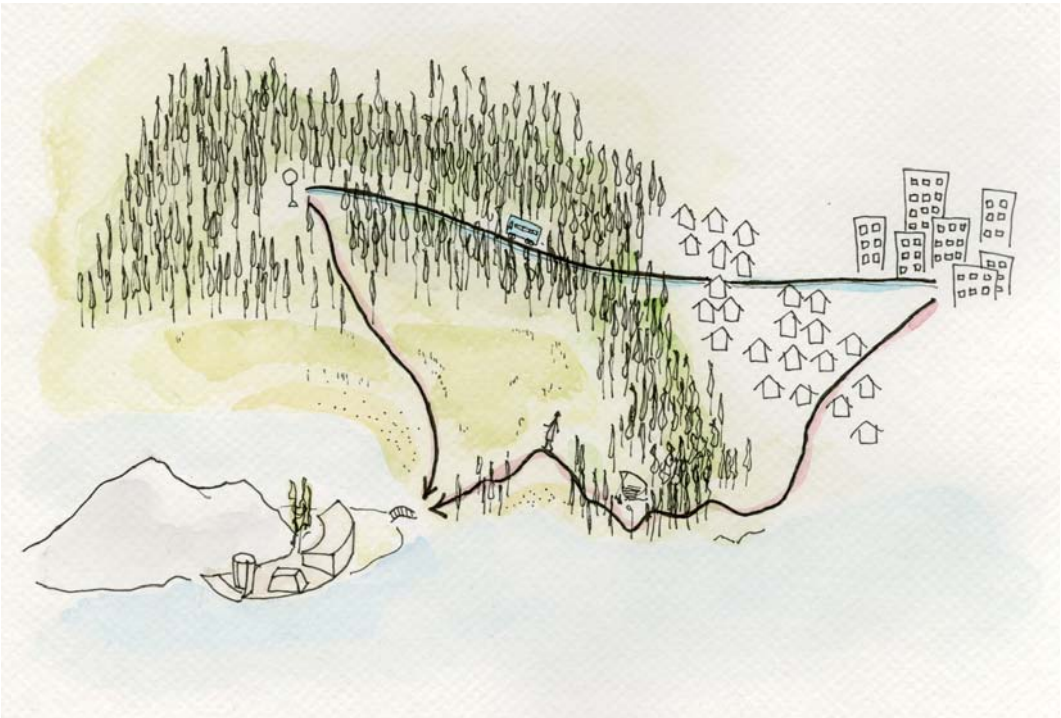


Figure 4.35. Idea drawing of the ways to sauna from the city.

Experience of the place begins when one leaves to the trip to the site. How people travel on the way to sauna unconsciously affects the first impression of it. Kalevala Sauna is situated in Jalkasaari, about 1.5 kilometre south-west from the city centre of Tampere. This walking distance gives visitors the gradual steps to the sauna. For example on the way from the city centre, people first walk the most active street in Tampere, gradually move to the residential area, then eventually reach the shore of Pyhäjärvi. Trails along the lake lead people to the site, showing the beauty of surrounding nature and some cultural places on the way. The road in the forest on the hill is another option to travel to sauna. This short hiking gradually elevates the emotional sense to the nature, making people prepared to start the bathing in the nature.

There is also a bus line connecting the site directly from the main street of city centre, Hämeenkatu, as well as some residential areas. Therefore, the site is close enough for convenient access, yet in a proper distance from city life. One has to visit here on purpose, otherwise will never reach here: it is not somewhere people pass-by accidentally. When one makes a decision to bring oneself to the place, the experience of the Kalevala Sauna begins.

Site analysis

4-8. Surrounding Context



Figure 4.36. The surrounding context of the site. 1:5000.



1. A factory building in a residential area



2. Bus stops



3. A hotel



4. A beach in the north of the site



5. A round-shape object



6. A small pier to Pyhäjärvi



7. A sandy beach



8. Greenery of the park



9. Kesäteatteri, an outdoor summer theatre

Figure 4.37. Photos of the surrounding.

The site locates on the tip of Atlaspuisto, the park of cultural happenings. On the hillside up to an observation tower Pyynikin näkötorni in the north, the lawn field of the park spreads towards Pyhäjärvi, the southern lake of Tampere. The shoreline creates sandy beaches, one of them is situated along the bay in the north of the site. Surrounded by the forest, the park gently keeps out the bustle of the city to retain the calmness in the nature. The area holds many cultural elements such as tennis courts, a hotel, trails along the shore, and Kesäteatteri, summer theatre and its accompanying facilities, most of them are opened only during summer. Therefore, the surrounding shows seasonal changes of human activities: the area sleeps during winter while it gets relatively active during summer. By contrast to the cultural aspect, the place offers great occasions for relaxation. Throughout the year, people walk dogs, jog around, climb up the rock hill on the site, and enjoy the magnificent view of the lake.

Site analysis

4-9. Interpretation of the Site

The site, Jalkasaari, is an island in the lake Pyhäjärvi, divided from the small peninsula of Atlaspuisto by a narrow shallow canal. After crossing a small bridge over a canal, a small path appears in front of visitors, leading them to a high rock hill embeded on the west half of the island. It faces to a bay in the north while other sides opens to Pyhäjärvi, providing magnificent landscape of forests and the city on the other side of the lake.

When spring comes, seagulls nest on the tip of the island and trees are dressed with vivid green in summer. Those colours turn into sober in autumn and the snow totally covers the island and frozen lake during winter. The seasonal changes constantly give us new awareness of different beauty of nature in each visit, so that human movements vary according to it. Nothing ever remains same here. In this island of lively nature, the spacial senses of the Kalevala, analysed in the Kalevala chapter, are indeed alive.

Figure 4.38. Jalkasaari. A view from a beach in the north.



A view of the city of Tampere on the horizon.



An isolated island in the lake, losing the ice connection in spring.



A view of a bay shore in the north of Jalkasaari.



A view of the forest in distance.

Figure 4.39. Spatial sense of the Kalevala in Jalkasaari, "Water".



Spaces unfolded vertically and horizontally.



A shore in the lake level and a rock hill hiding spaces behind it.



Layered places.



Vertical spacial connection.

Figure 4.41. Spatial sense of the Kalevala in Jalkasaari, "Spatial depth".

Water

Kalevala narratives are unfolded around water. Lakes divides lands, rapids divides tribes and rivers divides human fates. However there are always another side beyond it. Since water in Finland generally means lakes, which individually locates inland, the other side of water is accessibly without crossing water. Thus, Finnish geographic feature builds the unique special notion of water, simultaneously divides places and connects them with shore.

Jalkasaari abundantly shows various speciality of water because of its location. The north view displays a bay shore in easily accessible distance while a city appears on the horizon in the south-east direction. A small island in the west projects an isolated land in the middle of the lake, although frozen water connects it to the land in cold seasons. The views give visitors the thought of their own locations in between places with a notion of distances.

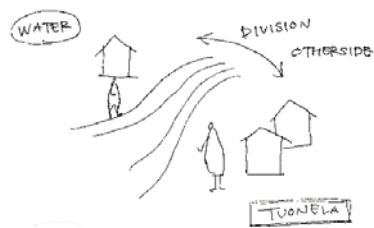


Figure 4.40. Interpretation of spatial sense of the Kalevala, "Water".

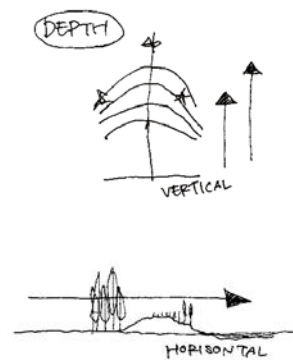


Figure 4.42. Interpretation of spatial sense of the Kalevala, "Spatial depth".

Spatial depth

The most outstanding topography of the site is exactly a rock hill occupies the west half of the island, hiding spaces behind it. This geographic shape forms natural spaces in different levels vertically and horizontally. It eventually brings the spatial depth in human movements to create profound relations between people movements as well as between people and nature. As the Kalevala epic shows many different worldviews in spacial layers of human life, so the site provides people innumerable perspectives to experience the place.



Small steps stretching under the water.



Reflected view on the lake, resembling the image of the underworld.



Stairs to the top of a hill.

Figure 4.43. Spatial sense of the Kalevala in Jalkasaari, "Continuity of the world".



Figure 4.44. Interpretation of spatial sense of the Kalevala, "Continuity of the world".

Continuity of the world

Different worlds have connection in the Kalevala: the firmament with a pillar of the heaven, and the world of the dead with a river. Desire to reach to the other world has retained in people's great interests, therefore the mythology treats adventurous and instructive journeys to there in any aspect. A rock hill in Jalkasaari invites people to the another level of place with steady stairs climbing up towards the sky. On the other hand, small artificial steps reaches into the lake which projects reflected scenery, reminds us the mirrored image of the world of the dead under the water. Those existing elements enriches the imagination of the Kalevala world to support the experience of mythology here.



Seasonal transition in Jalkasaari.



Different views of Jalkasaari in seasonal changes.



Transition of the water level.

Figure 4.45. Spatial sense of the Kalevala in Jalkasaari, "Time and space".



Figure 4.46. Interpretation of spatial sense of the Kalevala, "Time and space".

Time and space

Time and space are strongly connected in the folk poetry. Movements in space are metaphorically expressed in time, and so the change of time is in space. In Jalkasaari, the tight relation between space and time richly affects the spacial experience. Trees shows dramatical transition of its appearance according to the season. Snow covers the ground and shuts the access to a hill while frozen lake temporally stretches the accessible area during winter time. The water level of the lake rises and drops as time passes, accordingly the shoreline changes. People consequently experience momentary phenomena in transience of place. Time changes the place and place tells the time.

Design

4-10. Core Conception



Kalevala Sauna, is a public sauna expresses the world of the Kalevala. Mythological atmosphere is unfolded in perceptual space, representing the spirits of Finland. According to the antecedent research in previous chapters, it is revealed that spatial quality of architecture is built in interactions of various factors: perceptions, mutual relation between body and space, human as phenomenon, expressive experience and change of age and culture. Thus human body is the vital core of architectural expression in kind.

When expressing mythology in architecture, perceptual transition should be carefully considered. As previous chapters philosophically clarified, oral tradition lost their genuine meaning when transformed into written speech. Namely, words as sound became letters as visual figure. In the rapid current of ocular ascendancy today, awaking other bodily senses is conceivably essential to recover authenticity of mythology in some extent.

In order to achieve this fundamental task, several expressive methods are adopted in proper ways: expression of experience, representation in abstraction, and embodiment in detailed metaphors. In addition, various inducements simultaneously brings human contrastive roles, that is to say, visual perception with direct images makes people objective spectator while intervention to spatial experience makes them subjective fraction of the mythic world. The literal epic Kalevala is consequently transformed into perceptual expression by applying both ocular and other sensory features, being experienced without words.

As the Kalevala culturally constitutes a Finnish identity, so sauna does. Primitive conceptions of it crucially reflects the Finnish indigenous perspectives, especially of the nature. At the same time, bodily experience of national bathing culture let bathers feel natural power as well as own body. In this perceptual space, human body, Finnishness and spatial expression unifies to form the Kalevala world in architectural manner.

Figure 4.47. Concept drawing for the Kalevala Sauna.

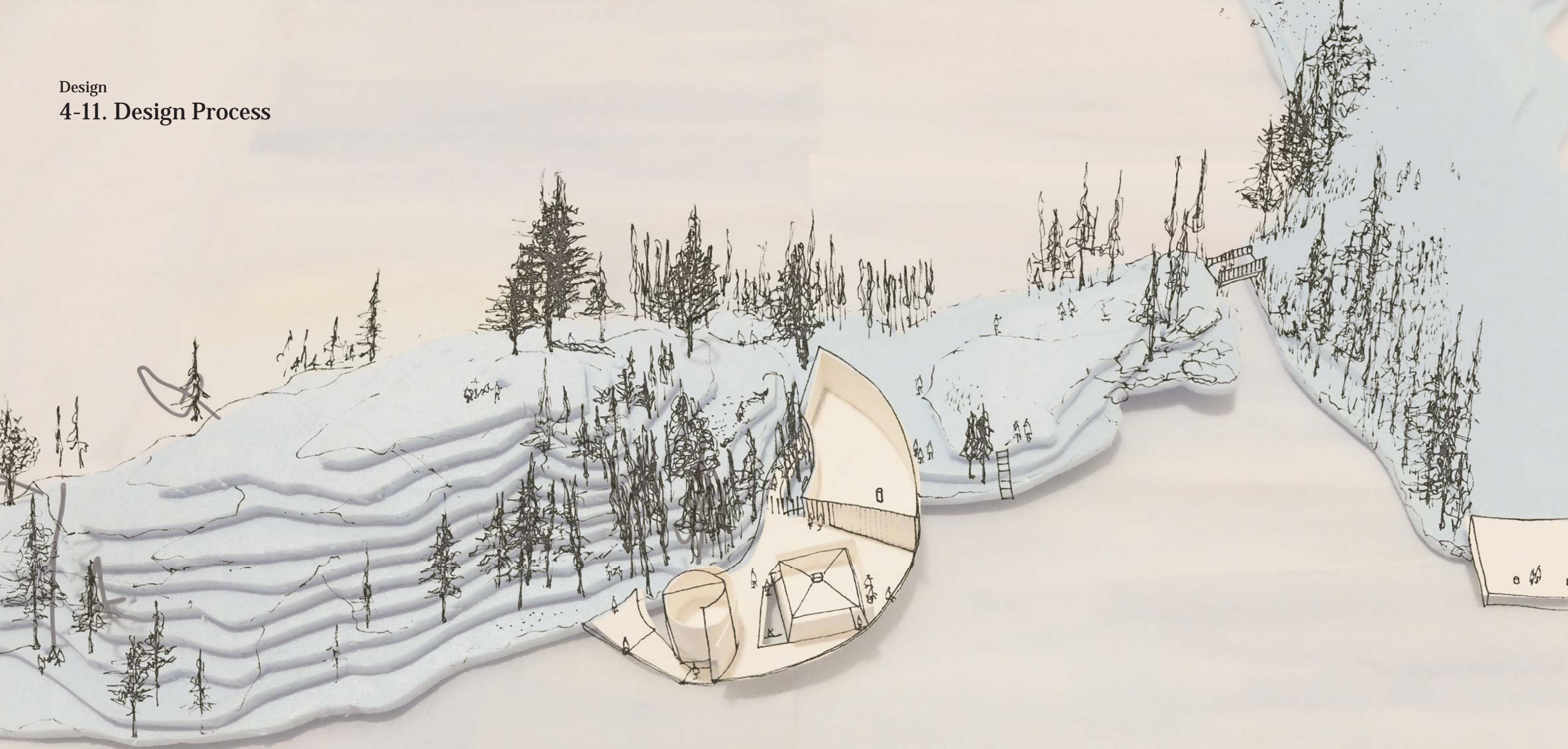
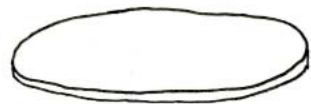
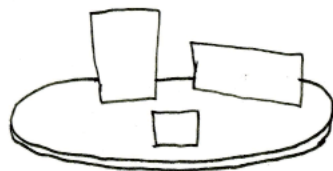


Figure 4.48. On the foot of a rock hill in Jalkasaari, the Kalevala world is unfolded.

Design strategy



The genuine round-shape platform is applied to build a horizon of experience, embodying the world of mythology unfolded on it.



Building volumes appears on it, with individual expressive themes for each. Platform unites those different spatiality into one, creating one entirety of the mythic world.

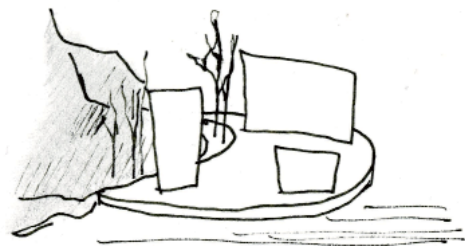
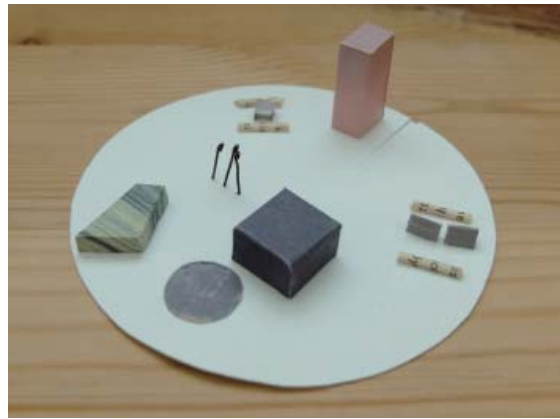


Figure 4.49. The basic idea for expression of the Kalevala in sauna in the nature.



Movement of sauna bathing has several steps, yet no direction. How to travel between several spaces is thoroughly depending on own decision.

Figure 4.50. Photos of concept models.

Expressive methodology

According to the analysis of case study in previous chapters, design methodology of mythological expression is various, additionally they mutually corporate in a variety of ways. The proportion of them ultimately results in empirical memory of place. The Kalevala sauna applies several expressive methods to enrich the mythic experience more profoundly and perceptually.

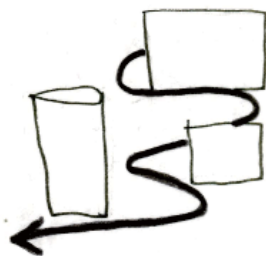


Figure 4.51. Experience as a character of myth.

Experience

The individual theme in each building materialises atmospheric spatiality in it to provide mythic scenes in every steps of sauna process. Platform is embedded to connect the bathers' movements in between narrative spaces as well as existing natural elements appearing on it. This artificial ground of mythological experience gives people free options that they have to make decisions where to direct themselves. Thus, the platform works as a stage for experience of the Kalevala and people on it perform traveling between the narratives as the Kalevala characters do.

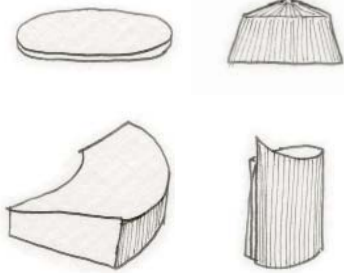


Figure 4.52. Abstraction in shape.

Abstraction

Circle is the most simple and supreme geometric shape. It symbolises balance, connection, eternity and conclusion of entirety. The platform with symbolic shape emphasises the independency of the world of the Kalevala. When it is set on the site, however the nature breaks the complete shape into organic irregular form. The intervention of environment creates the unevenness on the platform, in which human body and the nature interact.

The building appears among the mutual communication between human and nature without showing the mythic atmosphere unfolded inside. Only forms are visible in common material. This abstraction of the building hides the narrative scenes inside them, represents modest image of mysterious mythology.

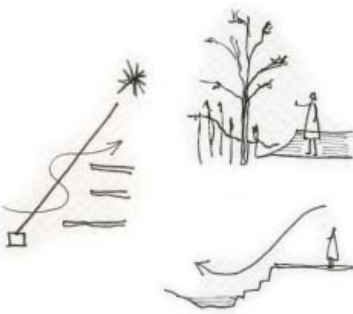


Figure 4.53. Direct expressions of mythic themes.

Direct expression

In contrast to the abstraction of simple exterior of buildings, expressive motifs appears directly. The detailed objects vividly picture the stories of the Kalevala to guide people into the mythological world of ancient Finnishness.

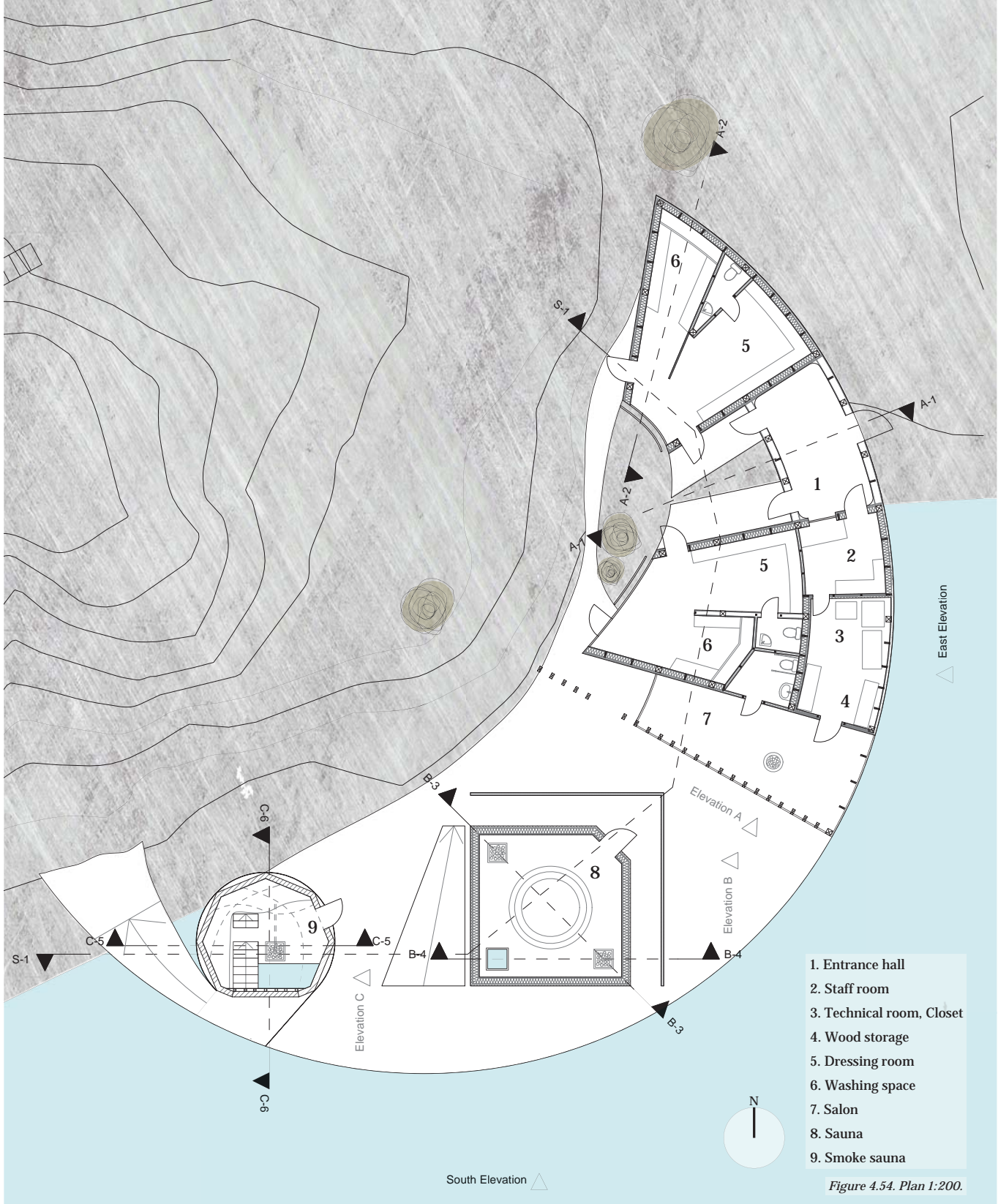


Figure 4.54. Plan 1:200.

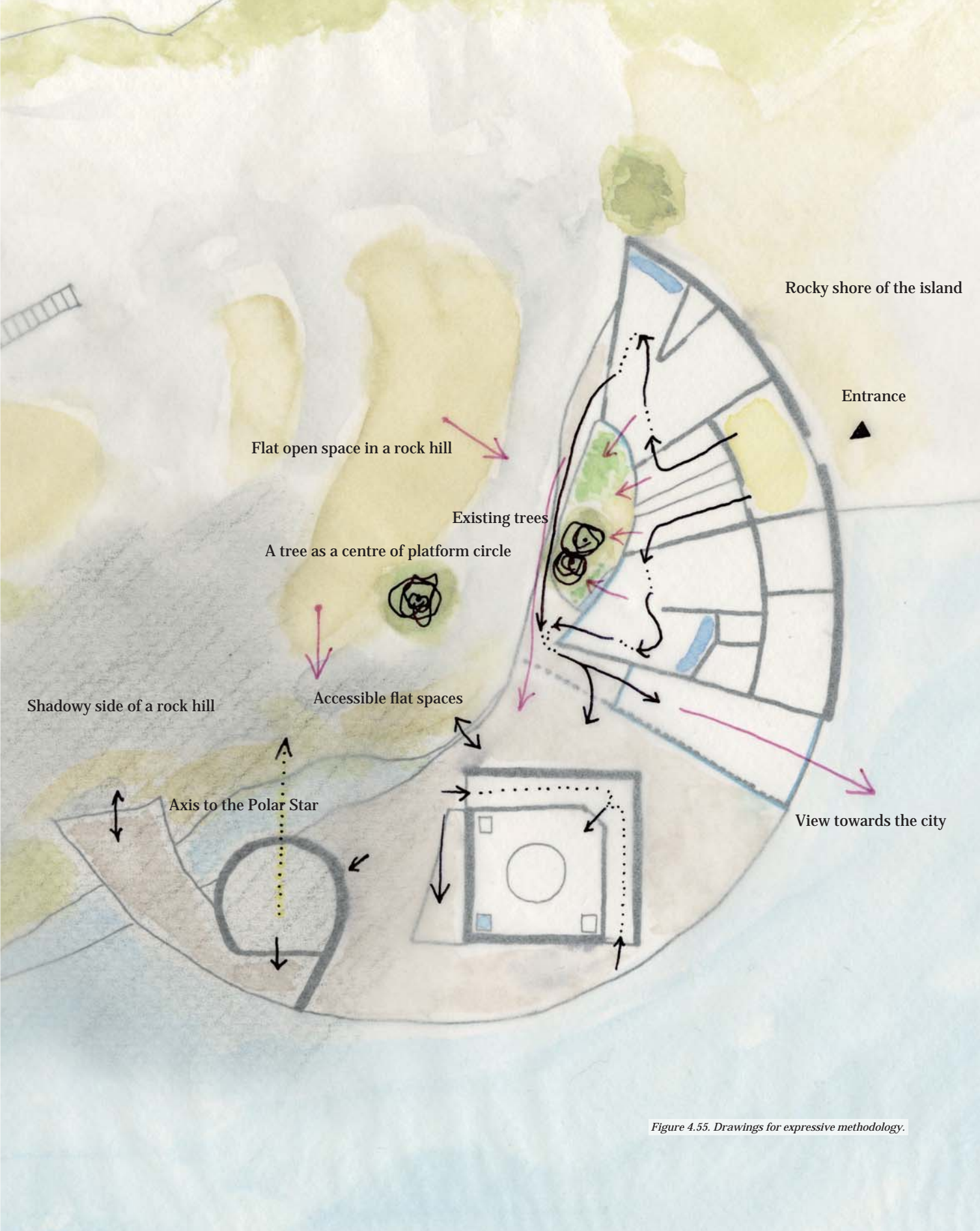


Figure 4.55. Drawings for expressive methodology.

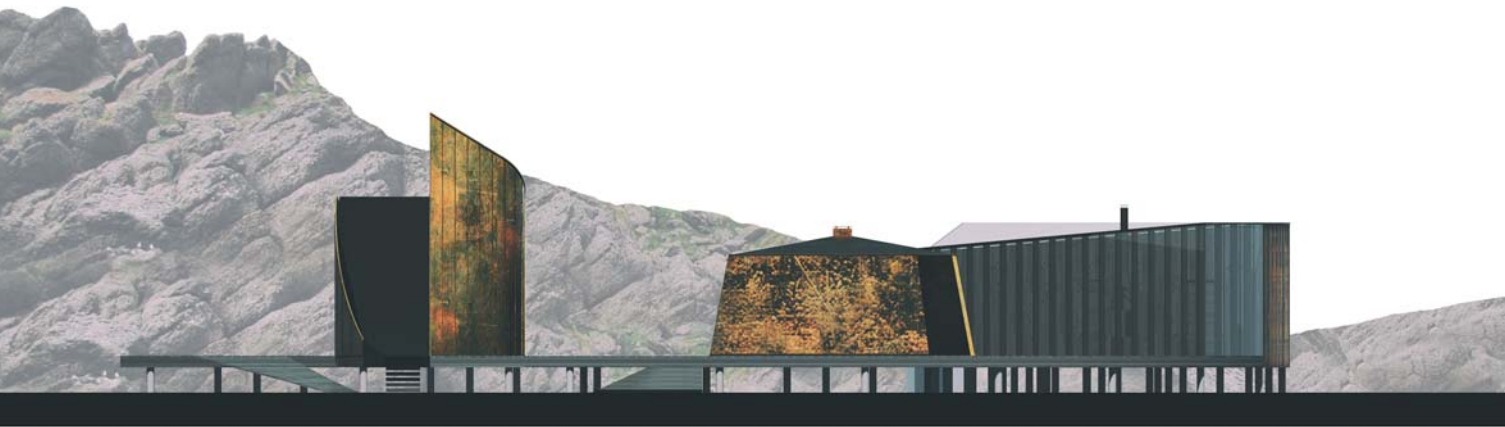


Figure 4.56. South elevation 1:200.

Different conceptions in each building

Narrative scenes appears in buildings, each has own conception referred to from the Kalevala epic.

The sauna experience commences with the theme of “**the beginning of the world**”. In the first building, the Finnish ancient notion of the Creation is expressed to start the whole mythological world, so the Kalevala epic does. In the different relation to the nature in each room, people gradually prepare both for bathing and for perceiving the authentic Finnishness, waiting them in the following space.

The second building people reach is a sauna of “**humanity**”. As human creates the core of the perceptual world, so the Kalevala treats this theme throughout the epic. The expression focuses on how human can be perceived. Referring to the philosophical analysis stated in Chapter 1, sauna forms the place for human to perceive own existence among the space as well as other people.

The last building, a traditional smoke sauna in the tip of the platform, utilises the ancient Finnish conceptions of the other worlds. Astronomic form of the sauna symbolises the indigenous idea on “**Maailmänpylväs**”, a pillar supporting the layers of the firmament, while an access to the lake going under the building embodies “**Tuonela**”, the world of the dead.

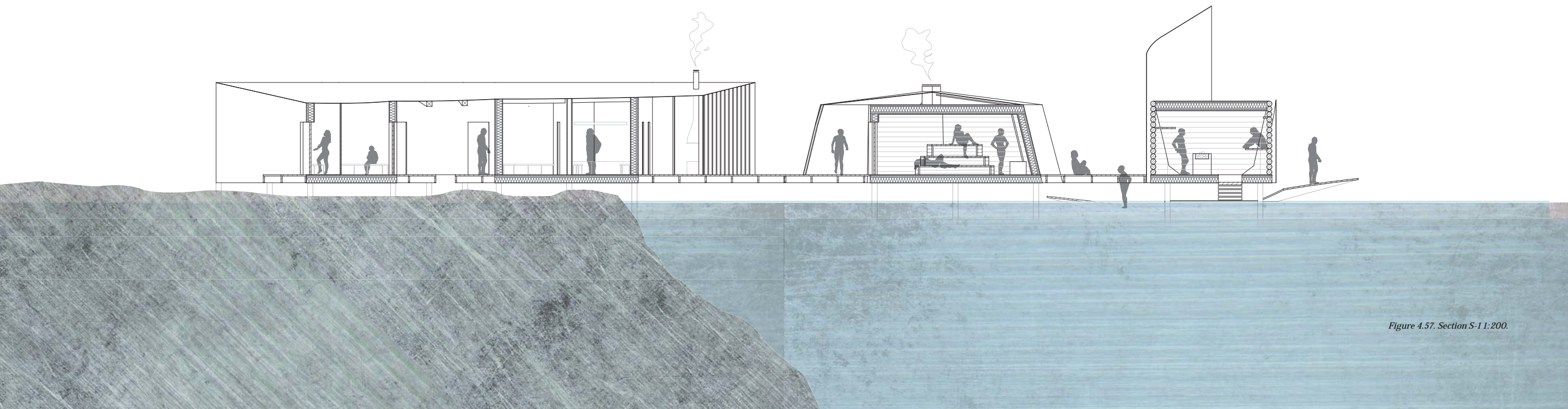


Figure 4.57. Section S-1 1:200.



*“From one half the egg, the lower,
Grows the nether vault of Terra:
From the upper half remaining,
Grows the upper vault of Heaven;
From the white part,
Come the moonbeams,
From the yellow part,
The sunshine,
From the motley part,
The starlight,
From the dark part,
Grows the cloudage”*
(Poem 1, Line. 233-244.)

The world begins from an Goldeneye’s egg’s incubation,
dropped from the knee of the Air Virgin.
After the birth of the essential elements of the world,
the nature starts forming its shape.
Human comes after all of the creation.

The experience of the Kalevala Sauna commences
with the great notion of the Creation.
Everything begins from here.

Figure 4.58. Concept drawing for the first building.

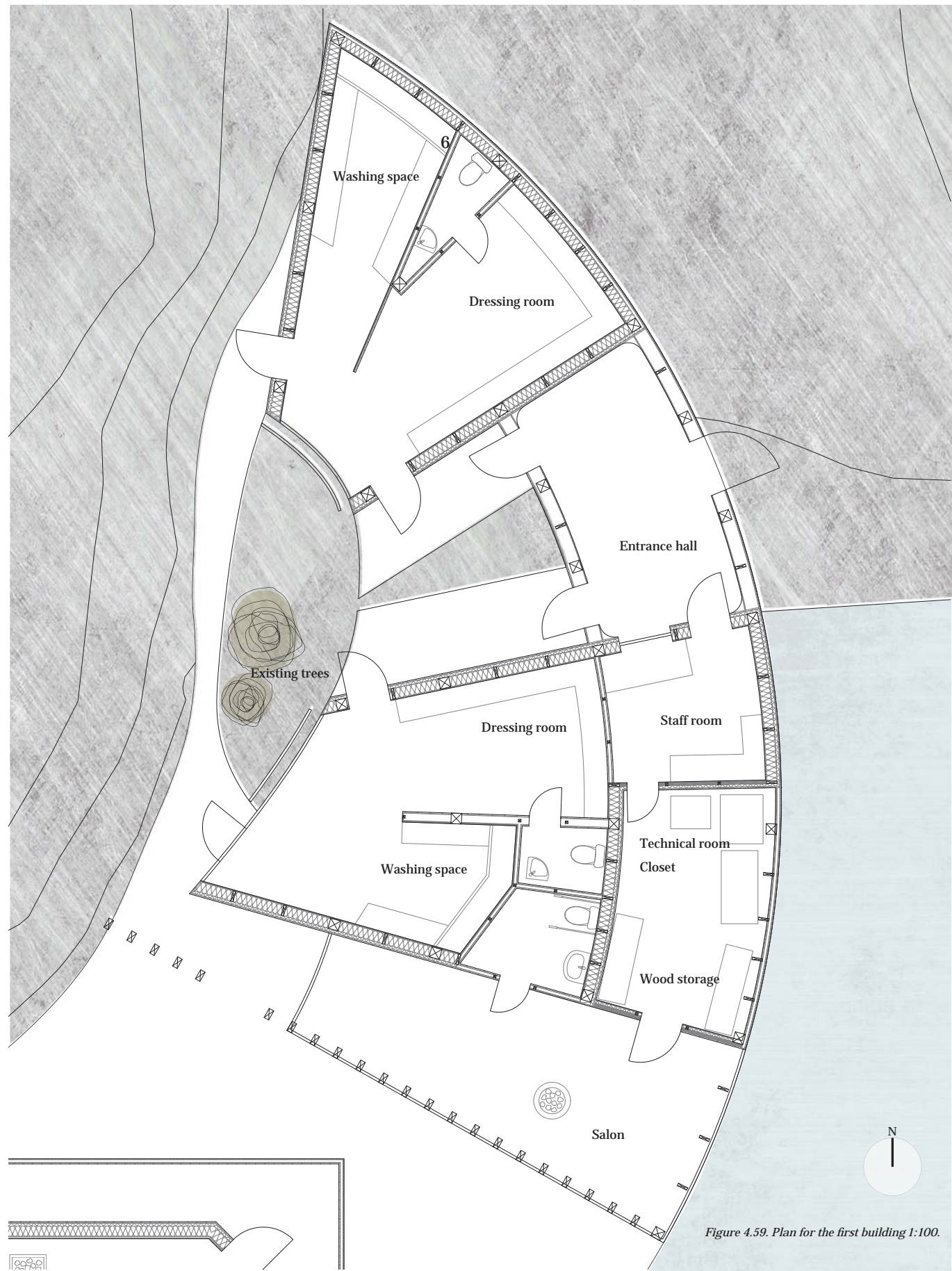


Figure 4.59. Plan for the first building 1:100.

As the beginning of the world gradually goes on its process, so the sauna bathing has several steps. Starting from the space of emptiness as an entrance hall, the conceptual scenery emerges one by one as people go forward the preparation process for sauna, in a proper distance with nature. When bathers reach to the platform after getting ready for sauna, they will realise that the nature finally appears in a tactile distance to commence the mutual interaction with it. The whole expressive process in this building gives first steps to awaken the bodily senses for following events, as if they are newly born to the perceptual horizon.

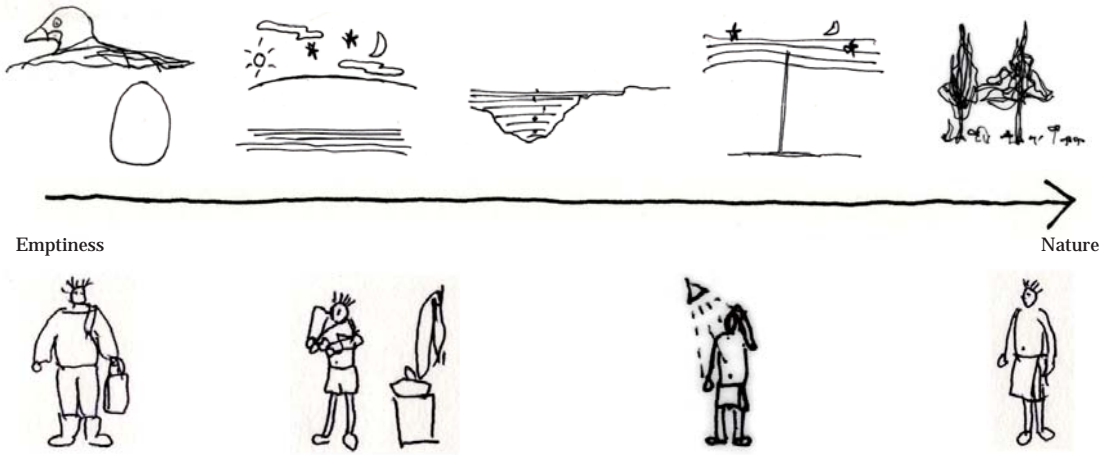


Figure 4.60. Process of the beginning of the world and preparation for sauna.

The copper outer wall resembles an egg shell, while the glass walls represents the inner film of it. Rectangular-shaped columns create the visual distance between indoor and outside. In a contrast to other rooms, a salon, as gathering space, faces to the lake view and city beyond the water, exhibiting a distance from the daily life.



Figure 4.61. Elevation A 1:100.

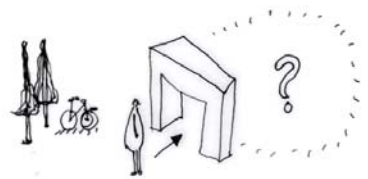


Figure 4.62. First building as a gate to the Kaelvala world.



Figure 4.63. Building as an egg of the nature.

The experience starts from the space of emptiness. What people see is only light filling a room. People first empty their mind to prepare for going forward to the space of the egg of the nature. After buying a ticket here, they move on to the next place, where they see the nature in a distance from corridors above the ground. Who went through the another door in the entrance hall appears just next to them, yet on a separated deck. Nature clearly emerges in front of them as if they are directing people to the different destination, to the dressing room separately for men and women.

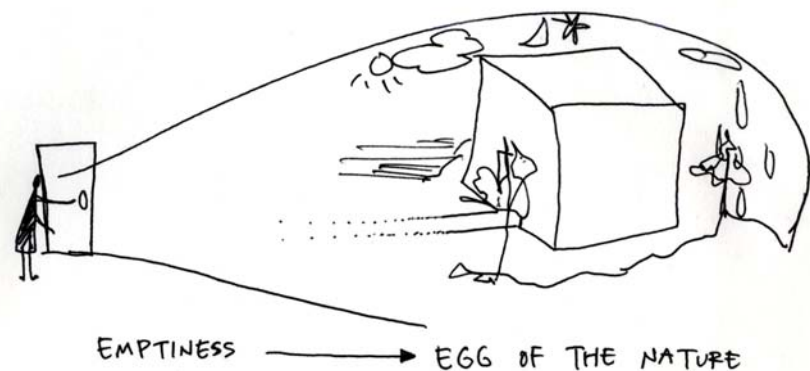


Figure 4.64. Process of the beginning of the world.

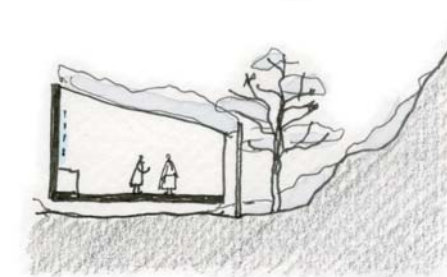


Figure 4.66. Seasonal differences in the relation to outside.

The dressing room and the washing areas are places of an egg of the nature. The view through the glass wall stops at the secondary semi-transparent wall, which showing the shadowy image of nature behind it. Only weather directly affect the vision, as the Air Virgin follows the Creating after the initial transformation of the egg in the Kalevala. Rain runs along the walls, sunlight reaches into the room in summer, snow covers the roof in winter and icicle hangs from the roof. Season changes the place.

In washing rooms, water plays an essential key, to wash, to purify and to awake the bodily senses to get prepare for sauna bathing. As rapids are often referred as elemental tasks to advance towards the next step in the Kalevala epic, perception of the water here leads bathers to the next stage.

From a rock hill facing to the rooms, indoor view is invisible, yet people can feel something happening inside. They view the shadow of human action from the upper level through the semi-transparent glass, whose relation embodies the picture of the layered space of the nature in the Kalevala.

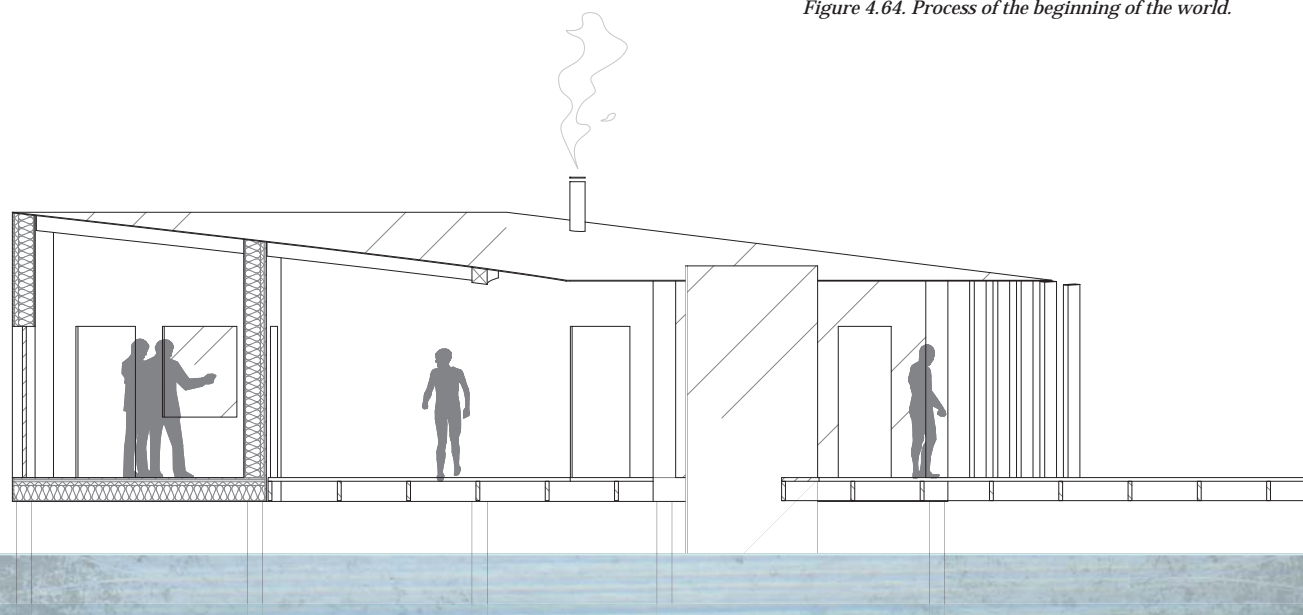


Figure 4.65. Section A-1 1:100.

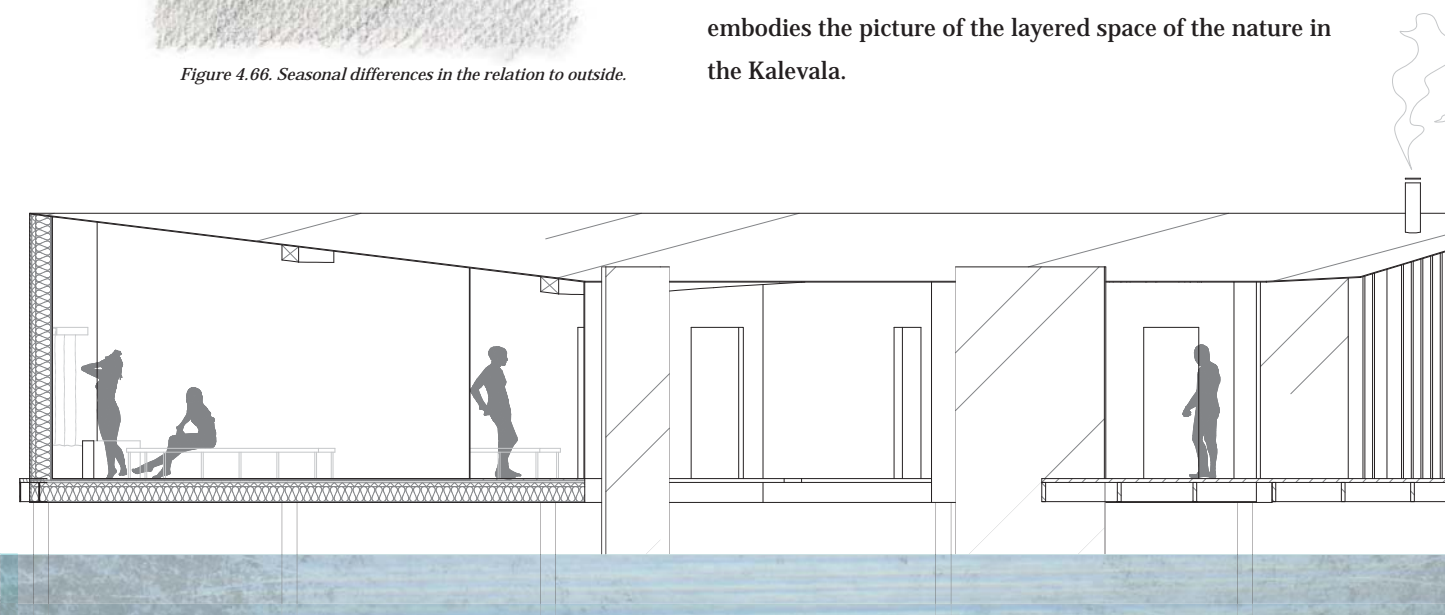
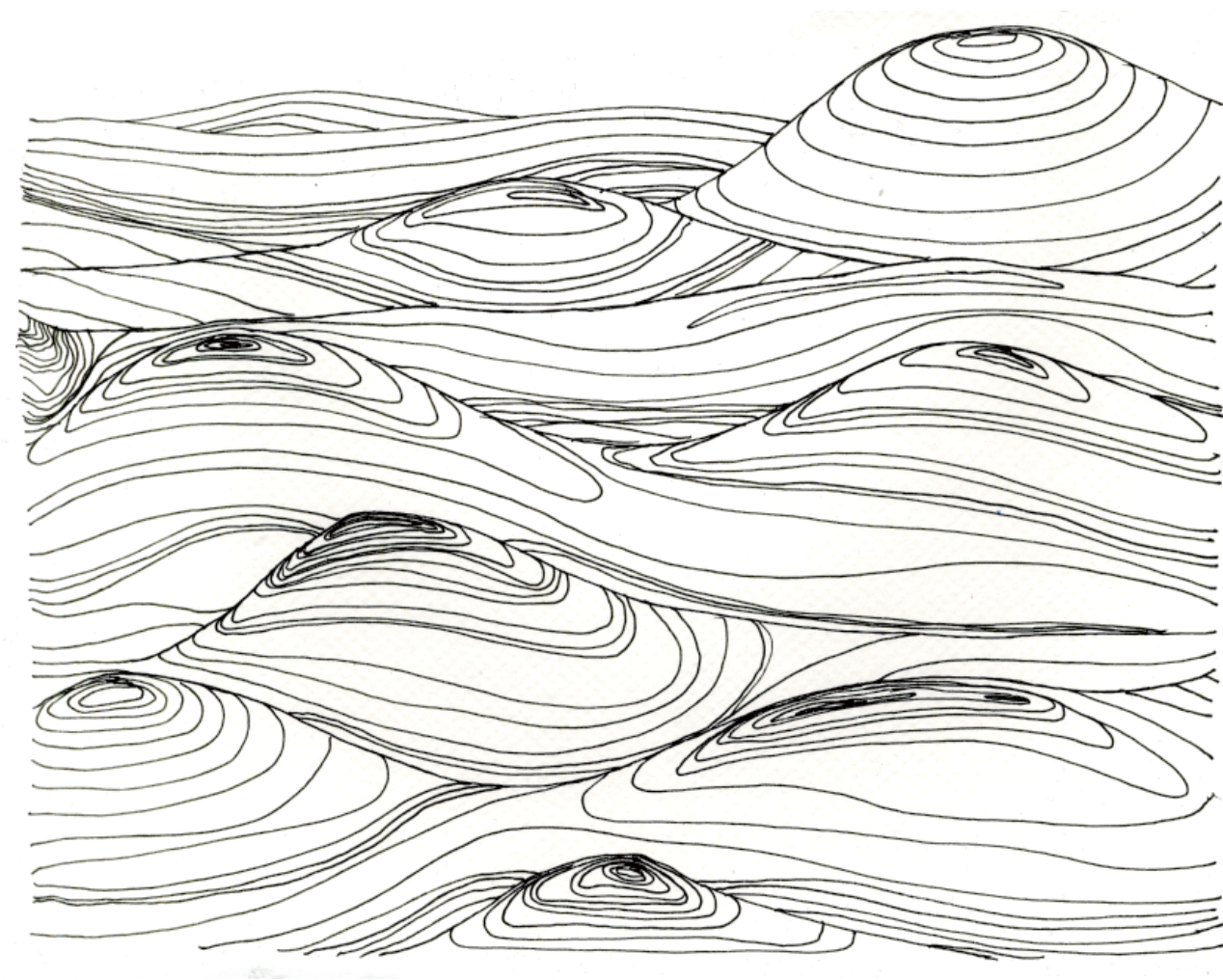


Figure 4.67. Section A-2 1:100.



Envy, rage, sorrow; jealousy, inspiration, desire, love.
Any kinds of emotions are portrayed in the Kalevala epic.
All the Kalevala narratives are unfolded around human.

Human is the most elemental article in the epic
as well as in the sensory space of sauna.
The body feels the space, the existence of other people,
and oneself.

People are mutually perceived by others as one of spatial
composition, simultaneously become a phenomenon to create
fragile quality of space.

The sauna of humanity embodies how human perceives human
and how one seek oneself in phenomena.

Figure 4.68. Concept drawing for sauna.

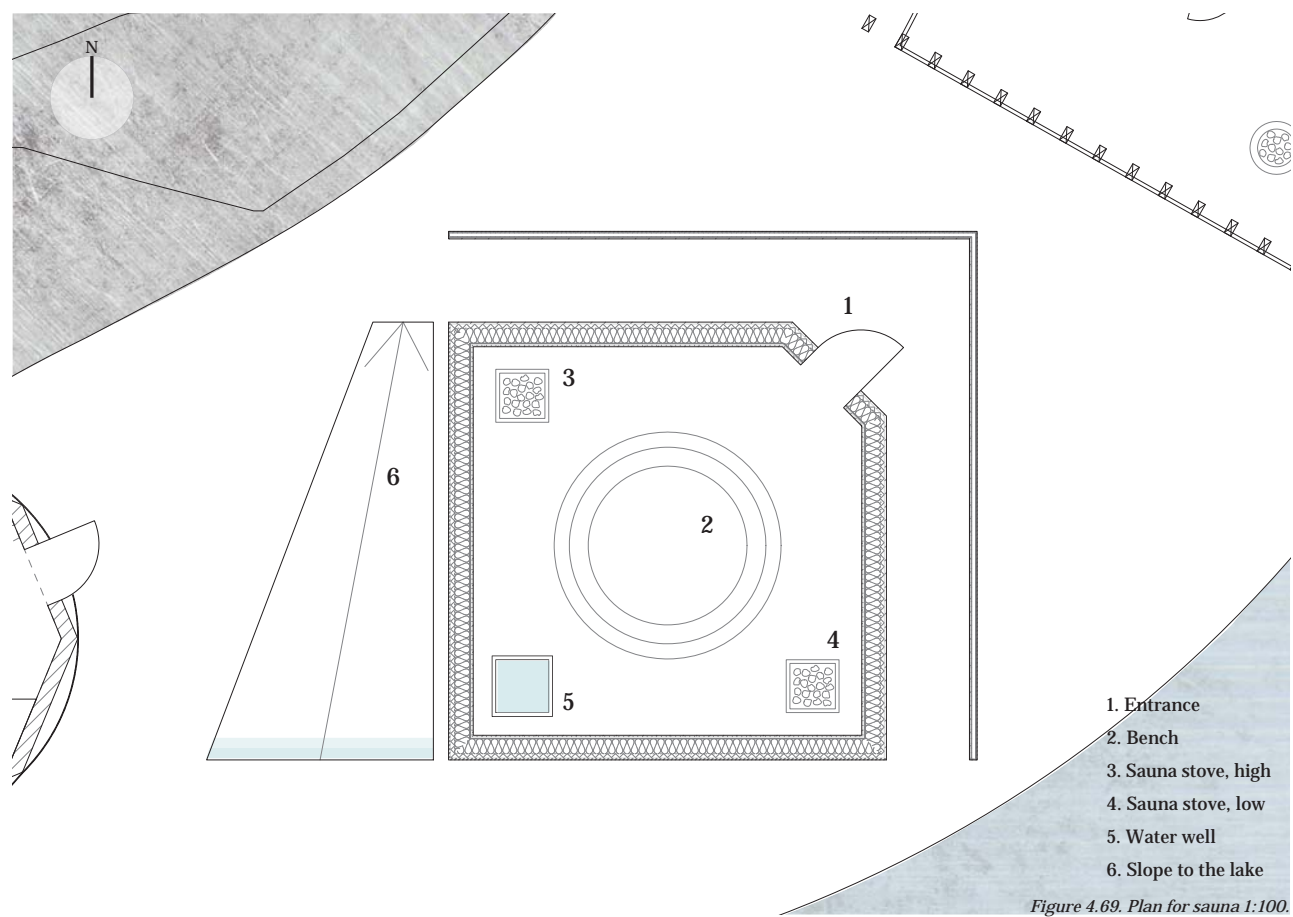


Figure 4.69. Plan for sauna 1:100.



Figure 4.70. Elevation B 1:100.

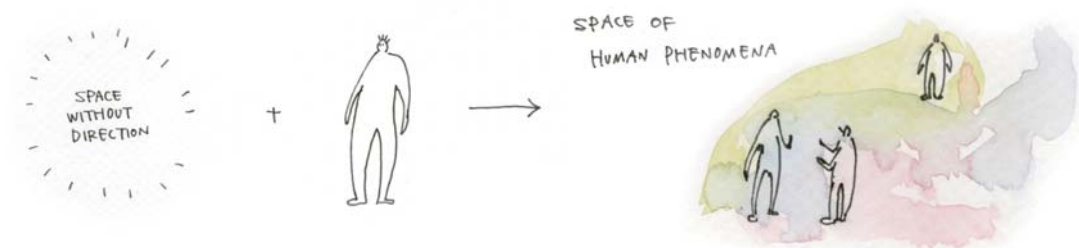
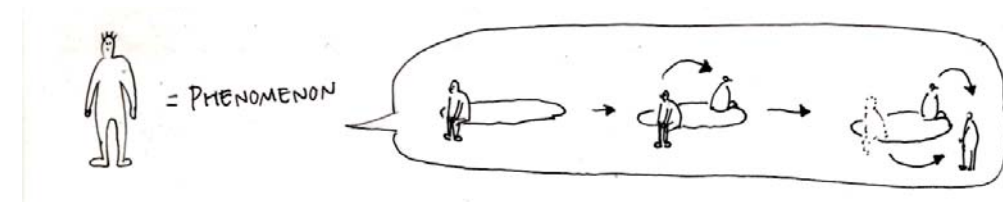


Figure 4.71. Interaction of human phenomena.

When considering human as phenomena, one's movements temporally change the quality of space, building fragile space. The momentary spatiality is perceived by others to remain in their empirical memory of space unconsciously yet deeply. Thus human intervention powerfully affects spatial experience. The sauna of humanity displays no outdoor view to disturb bather's mind. One round-shaped bench, without any end in shape, enshrines in the middle of the room between three quadrilateral objects: two sauna stoves and one water well directly opening to the lake below. To the symmetry in plan, trifling factors make place modesty uneven; different height of the sauna stoves emits distinct levels of heat while inclined walls in different angles slightly shift the centre of spatial balance. Unconsciously or not, human encounters the occasion that one has to make a decision where to place own body in plain yet uneven place, in mutual interventions of human phenomena.



Figure 4.72. Study models for analysing how seats can affect the decisions of placing oneself.

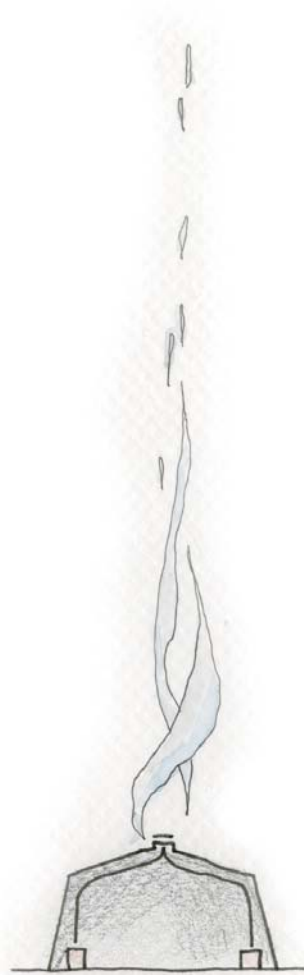


Figure 4.73. Pillar of smoke rising to the sky.

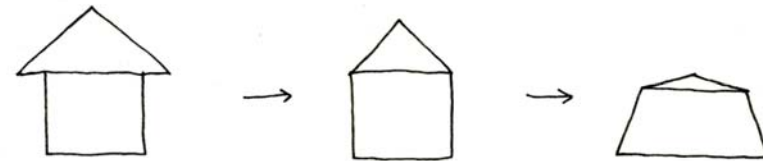


Figure 4.74. Building shape arising from typical housing typology.

Building form resembling the typical house shape embodies the image of human place. Chimneys from two sauna stoves unified into one in the roof top to build a pillar of smoke to the firmament, spotting the existence of human beings in the universe.

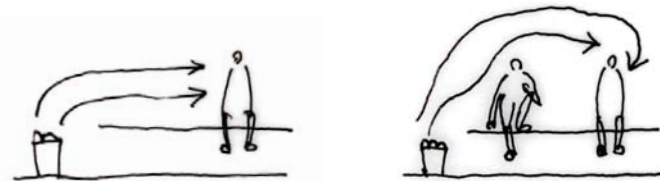


Figure 4.75. Waves of heat reaches according to the human existence.

Due to the shape of the bench and two different height of stoves, one possibly comes between stove and another person. The waves of steam consequently reaches to the body in influence of other people. In the other words, human phenomena changes perception of the heat in the air. Here, people face to own existences through their own bodily senses while feeling the existence of the others by environmental change of space, encountering "me" in any levels.

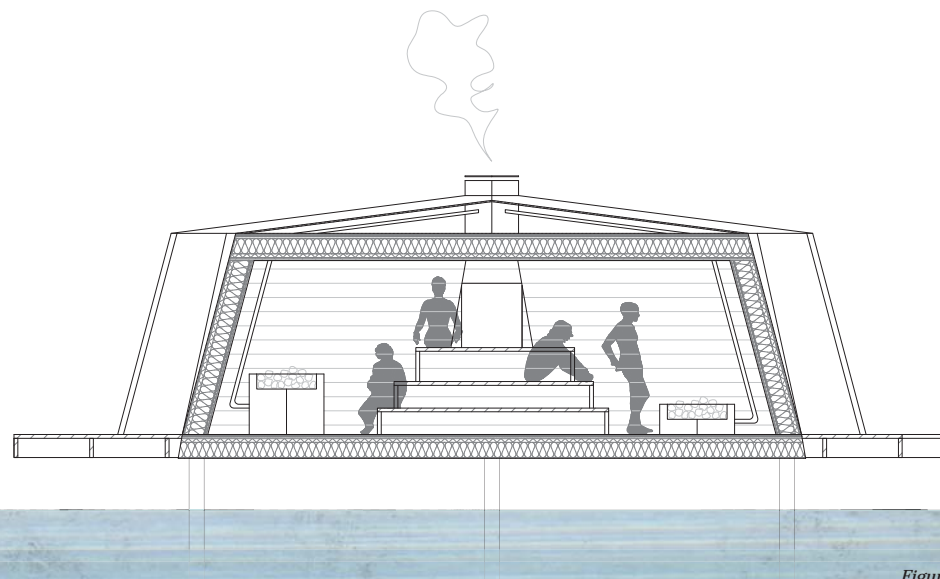


Figure 4.76. Section B-3 1:100.

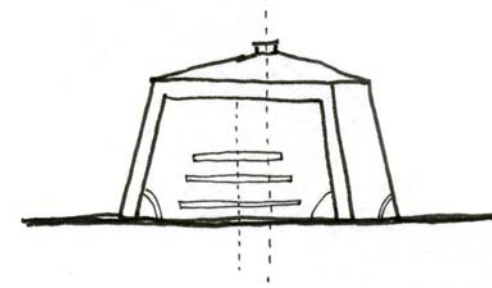


Figure 4.77. Different angles of walls and ubiquitous centres of space.

Different angles of inclined walls bring spatial unevenness in sauna. In addition, the spatiality is deeply affected by human intervention due to all modest factors. Consequently, there is no centre of spatial valance in it. Bathers have to seek their own position and have to build a new core of own body among phenomenal transition.

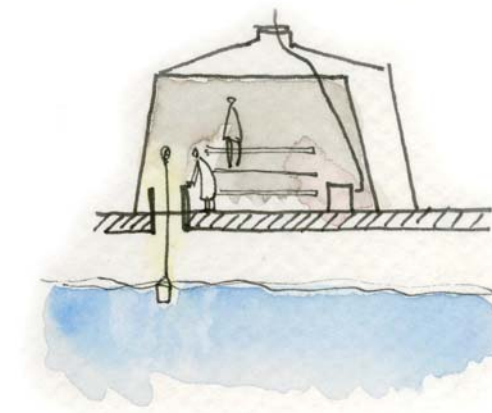


Figure 4.78. Water wall, the only opening to outside.

The only opening towards outside is a water well. Bathers get the water to through to sauna stones from there. Sound and light from the lake brings the modest feeling of the nature into philosophical space.

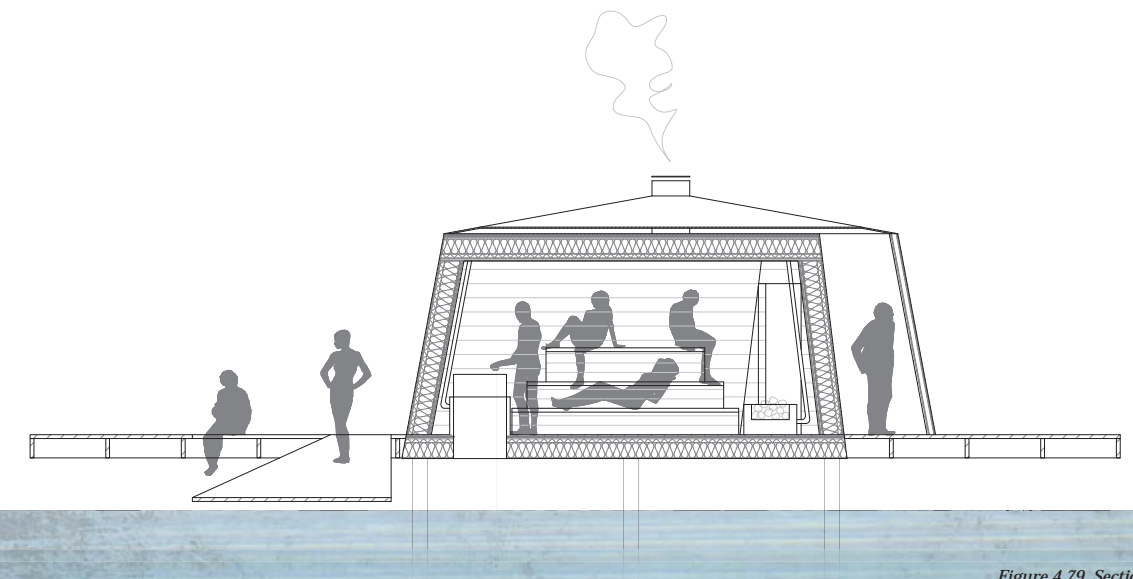


Figure 4.79. Section B-4 1:100.

Maailmanpylväs and Tuonela - Smoke sauna



Maailmanpylväs, a pillar of the firmament,
supports multiple layers of sky, the ancient Finns believed.
The Kalevala characters frequently climb up giant trees
to reach to the heaven.

Tuonela, the world of the dead,
is divided from this world with Tounela river.
The ancient notions, the dead live their life in another world
in a way they used to live during their lifetime.

Those two different worlds exist in another levels out of our
life, yet retain tight connections to this world in the old epic.
Curiosity to unknown world has remained in major current
of human interests.

In the Kalevala, characters often take trips to the other worlds
in order to encounter new perspectives,
although the ways are not simple.
The savusauna, a traditional smoke sauna,
reveals the indigenous worldviews of Finland
regarding to notional relation of several worlds.

Figure 4.80. Concept drawing for smoke sauna.

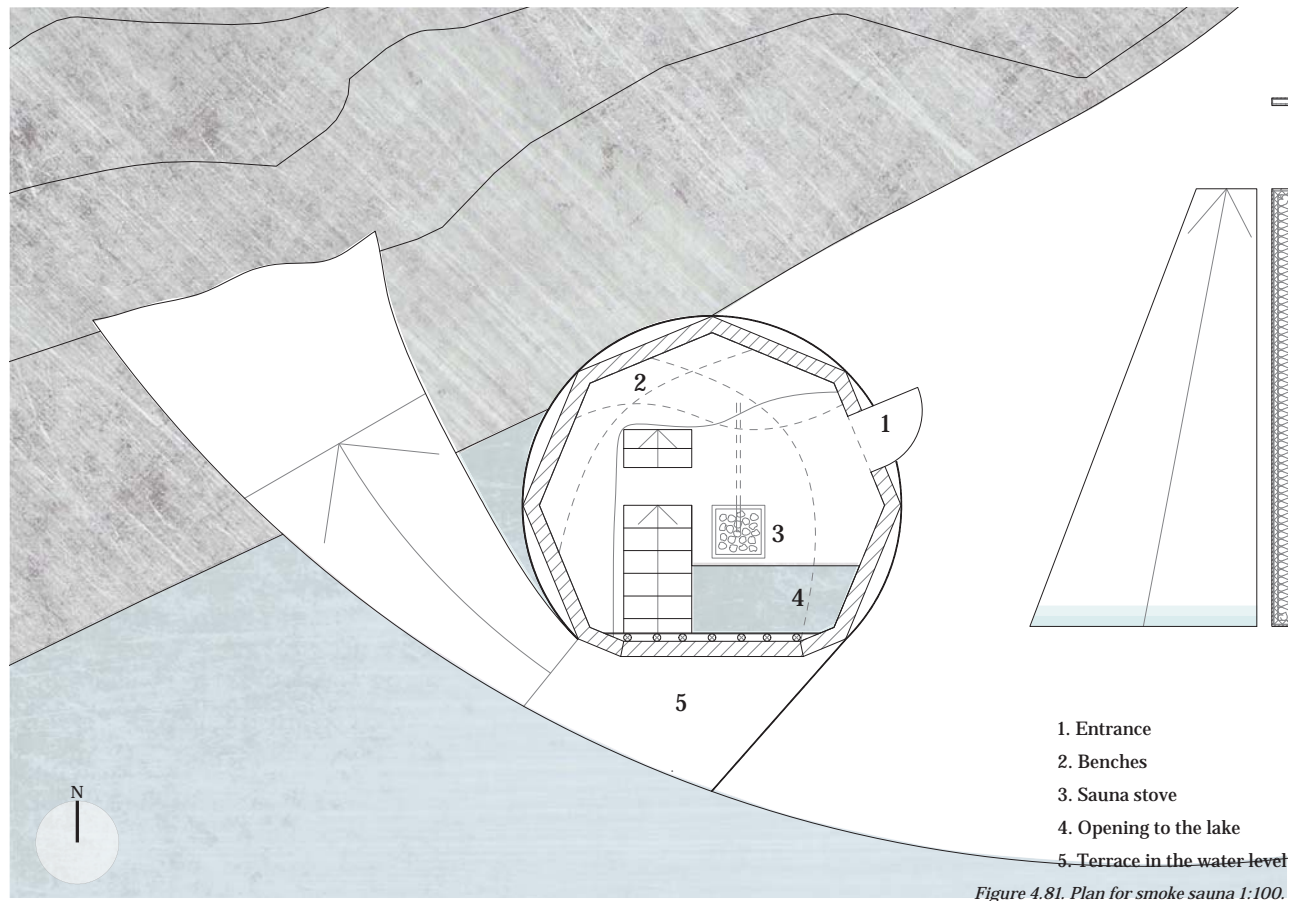


Figure 4.81. Plan for smoke sauna 1:100.

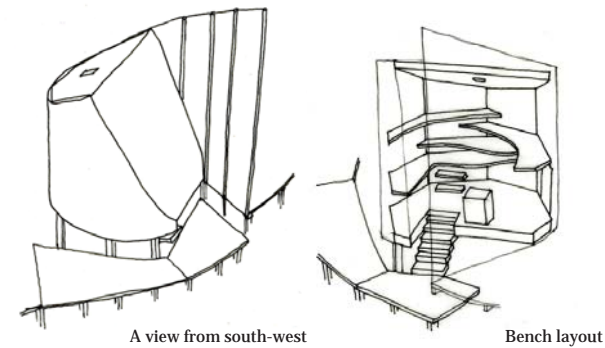


Figure 4.83. Axonometric views.

The sauna applies the traditional smoke sauna. The building is embedded in the south of a rock hill in the site, therefore evening sun from the north is obstructed while winter sun is already hidden below the horizon during usual bathing time. In the shadow of terrain, the whole building is wrapped with the textile-like facade resembling the veil of the air which the Gods in the firmament weaves in the Kalevala poems. This dark mysterious traditional bath embodies two different theme to show continuity of the worlds.

To adapt the mythic idea of the firmament into the environment, astronomic shape is utilised in building shape. Round shape of the whole building and benches represents the layered individual world while inclined wall follows the direction towards the Polar Star, which the ancient considered a supportive core of a firmament pillar, Maailmanpylväs.

A south wall inclines to the north follows the terrain of rock hill behind it, as well as the wind direction of Tampere, which in many case blows from the south. The wind is caught by the wall and rise up to the heaven.

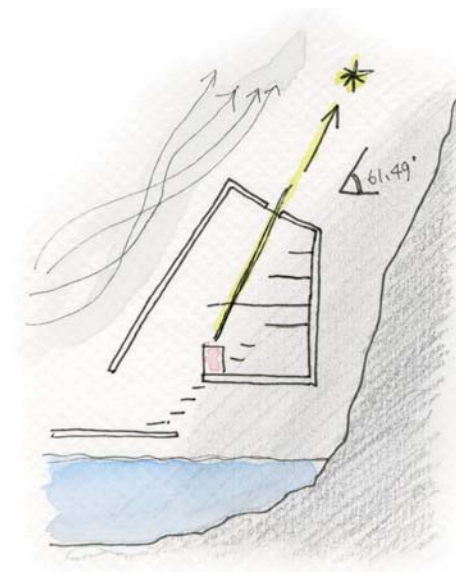


Figure 4.84. Idea drawing of astronomic shape in nature.

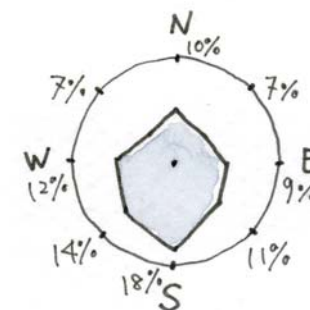


Figure 4.85. Wind direction in Tampere.



Figure 4.86. Concept model of layered space.

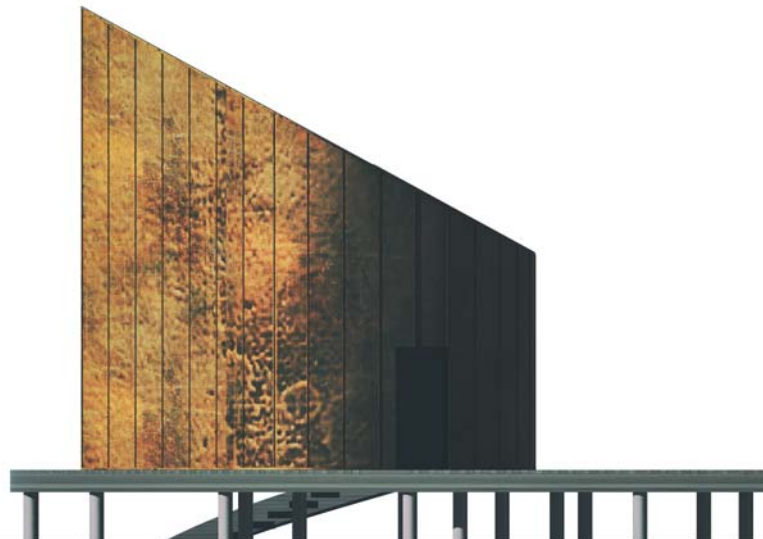


Figure 4.82. Elevation C 1:100.



Figure 4.87. Study model of layered benches.

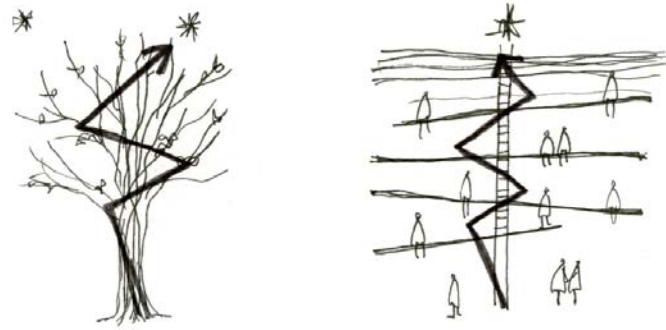


Figure 4.88. Parallel between climbing up a giant tree and benches.

Maailmanpylväs

As several skies cover the heaven in ancient folklore, so the benches in the sauna is layered. People climb up the benches as if the Kalevala characters clamber up the giant trees to reach to the heaven. The spatial expression of this sauna thus gives experiential opportunities to behave like a narrative persona in mythic atmosphere.

Only lighting in the sauna is a water way running from stove towards the Polar Star, surrounded by benches. Water for the sauna stones is poured along this line. Emphasising the connection to the firmament, the line of water and light stretching towards the rock hill embodies the story of cosmic elements confined in a rock of Pohjola, the north dark land.

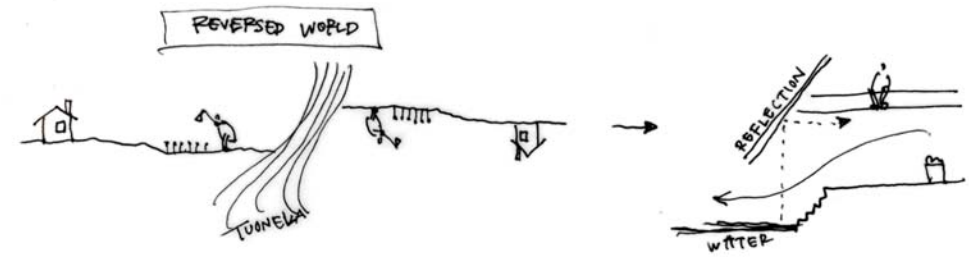


Figure 4.90. Parallel between climbing up a giant tree and benches.

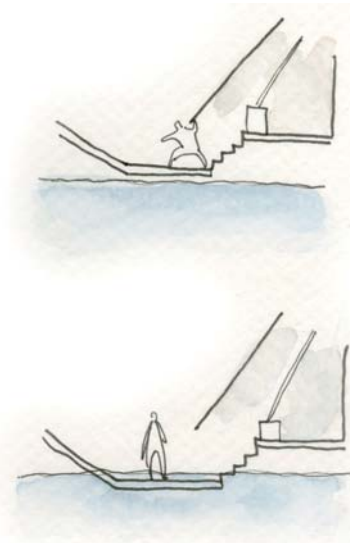


Figure 4.91. Building directions in environment.

Tuonela

To go out to cool themselves, people once across the boundary under the building. After stepping down indoor stairs, one reaches to the lower pier which is occasionally under the water according to the water-level changes of the lake as well as seasonal changes, makes the lake frozen in winter. The pier rises up to the same level of other areas where bathers used be, yet physically divided. As Tuonela, the world of the dead, is separated from this world with Tuonela river, the water of the lake splits the pier from sauna. As the dead live in a way they used to live in their lifetime, bathers see the same world after crossing the water, yet in a divided place. As the ancient notions describes Tuonela as a reversed world, the inclined wall reflects the mirrored image of water into sauna.

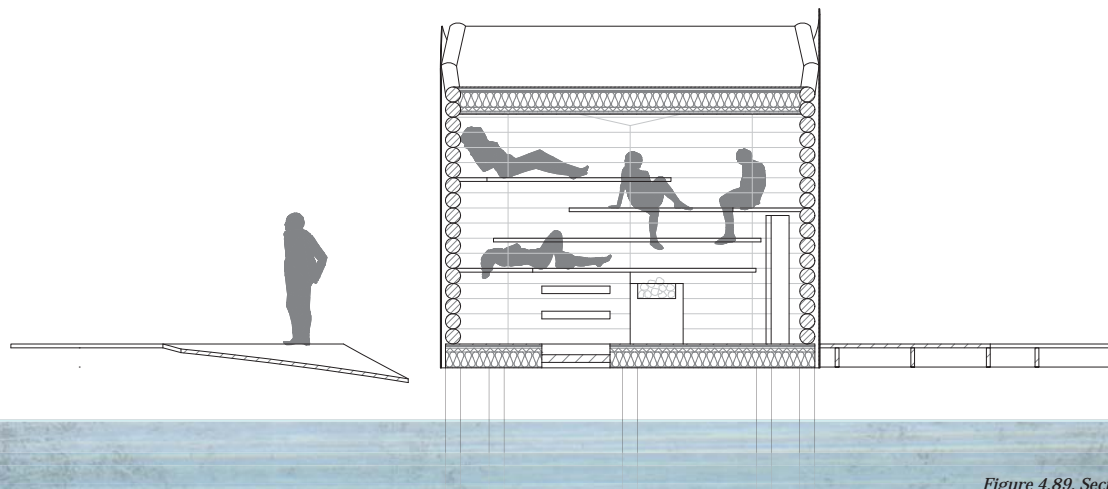


Figure 4.89. Section C-5 1:100.

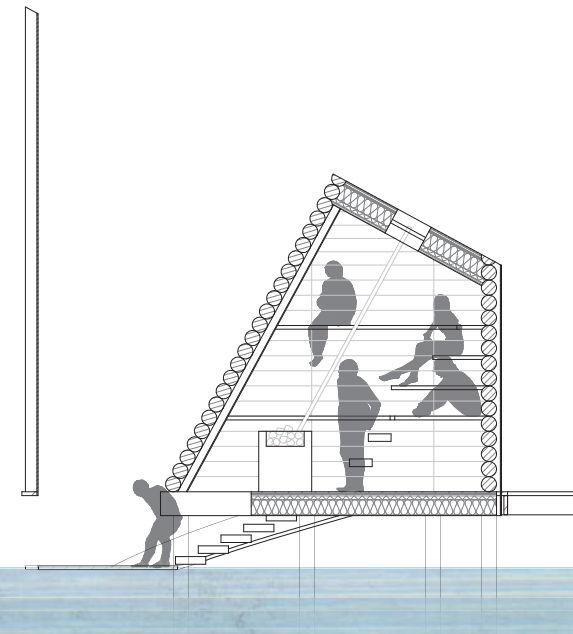


Figure 4.92. Section C-5 1:100.

Materials

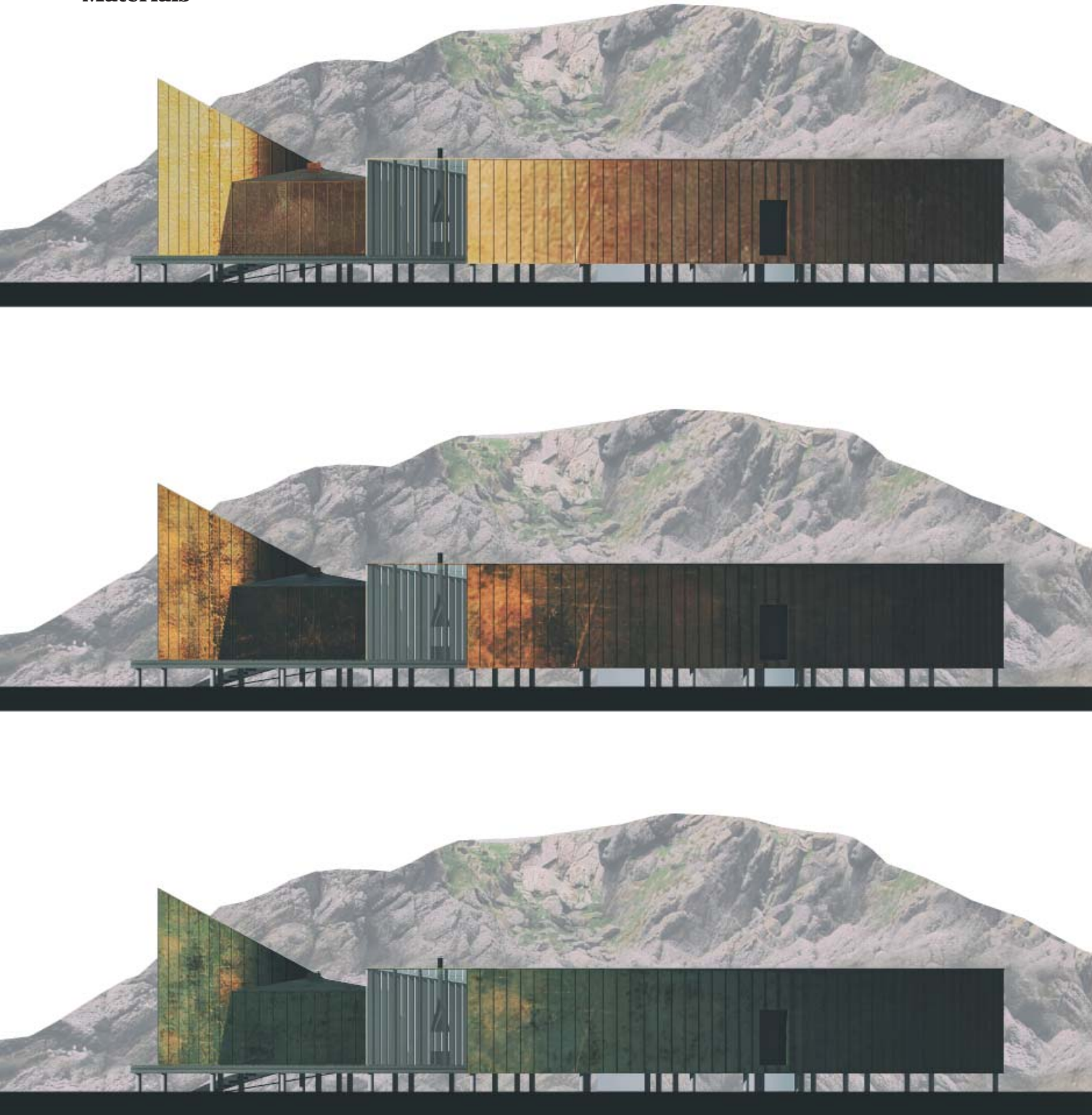


Figure 4.93. East Elevation 1.200. Material change in process of time.

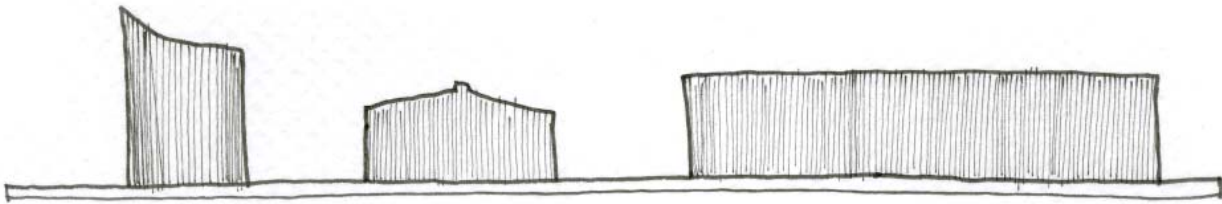


Figure 4.94. Abstraction in building materials.

Overall concept of material

The main idea of material is to create a massive volumes of expressive place on a platform as a stage of the mythological world. Geometric forms of buildings hide the mythic narratives unfolded in it, showing only the shape of them. The Kalevala expression is visible only in its abstraction unless one enters inside. In contrast to the indoor atmospheric space, outdoor expression is more simple to emphasises human movement traveling among the Kalevala world and nature.

Building volumes are covered with copper, partly with glass, while platform and interior are with wood. As time goes, material gradually transforms differently. On one hand, copper maintains its firm shape with some oxidation on surface according to age. On the other hand, wood gets more soft and weathered. Glass basically retains its original appearance. The contrast of different aging process of materials reveals the memory of place, simultaneously embodies the long history of two Finnish identity, the Kalevala and sauna.

Wood - Platform, Interior

Wood, the Finnish most traditional and vital material, is applied where human skin meets: platform where bathers possibly walk barefoot, sauna where people communicate with space, and many of interior part in the first building. Feeling of the heat and texture of wood gives bathers the impression of Finnish abundant nature and traditional sauna culture.

Copper - Building facade

Ilmarinen, a blacksmith, builds MaaIlmanpylväs, a pillar of the heaven, Sampo, a symbol of wealth and many other essential objects in the Kalevala. As he forges elemental motifs of folk epic, so the building here utilised the copper on its surface. It is as if the world of the Kalevala sauna forged by him.

Glass - Facade for the first building

To bring the fruitful relation to outdoor, glass is adapted in some part of the first building. Together with copper covering outer surface, glass plays a key role to represents the egg metaphor, referring to the notion of the beginning of the world.

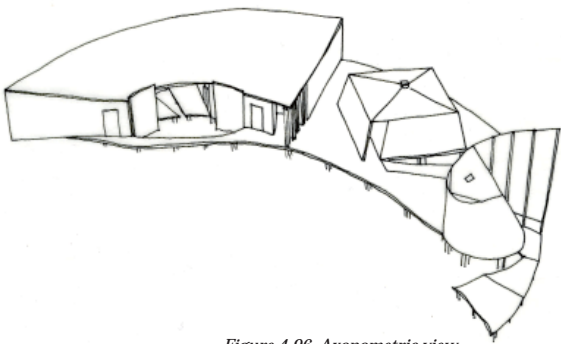


Figure 4.96. Axonometric view.

Floor Area

Overall building area 380,8 m²

The first building 150,2 m²

Entrance hall 14,4 m²

Staff room 7,9 m²

Storage and technical room 12,9 m²

North wing

Dressing area 15,9 m²

Washing area 11,9 m²

WC 2,0 m²

South wing

Dressing area 14,5 m²

Washing area 11,0 m²

WC 2,0 m²

Salon

24,5 m²

WC

3,5 m²

Terrace and outdoor corridor 29,7 m²

Sauna

39,0 m²

Sauna

24,5 m²

Semi-outdoor space

14,5 m²

Smoke sauna

11,5 m²

Terrace

145,0 m²

Figure 4.95. A view of the first building from a rock hill behind.

Design
4-12. The World of Kalevala Sauna



Kalevala experience spreads behind the massive copper volume.

Figure 4.97. A view on the way from a small bridge.



Open the heavy big door, then the world of the Kalevala begins.

Figure 4.98. At the entrance door.



Space of emptiness, filled with the air,
as the world begins from the Goldeneye's egg and the virgin of the air.
The only visible in front of you are doors, letting you follow the story of the birth of the world.

Figure 4.99. Entrance hall.



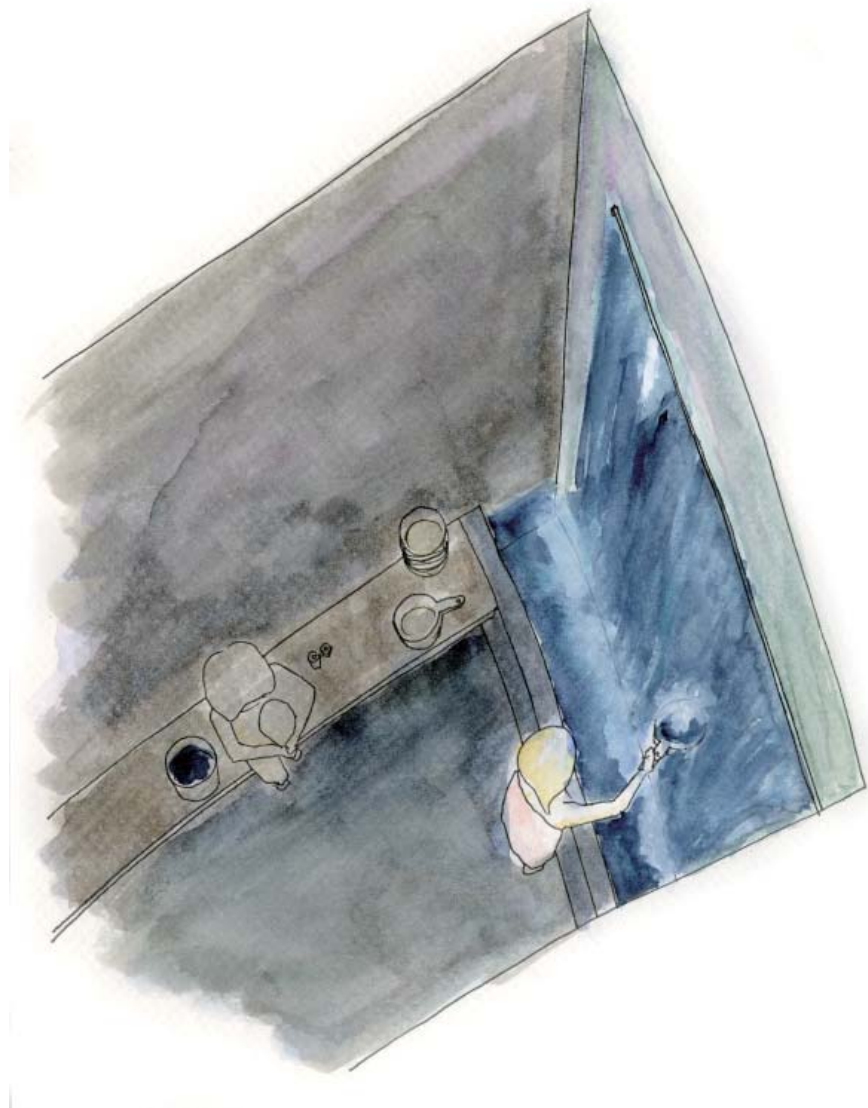
The nature. The thing, first born in the world. The thing, directing your destination.
 Two destinies meet again closely yet in distance, before proceeding to different directions.
 As if the nature conducts your fate.

Figure 4.100. The ways from the entrance hall to dressing rooms.



Place of preparation for authentic bathing experience.
 Feel the nature in shadow. Only light and weather affect the space.
 Sunlight shines inside in summer.
 Rain runs from the roof, the wall, then to the ground in autumn.
 Space is hidden under snow in winter.
 And icicles tells the arrival of spring.

Figure 4.101. Dressing room.



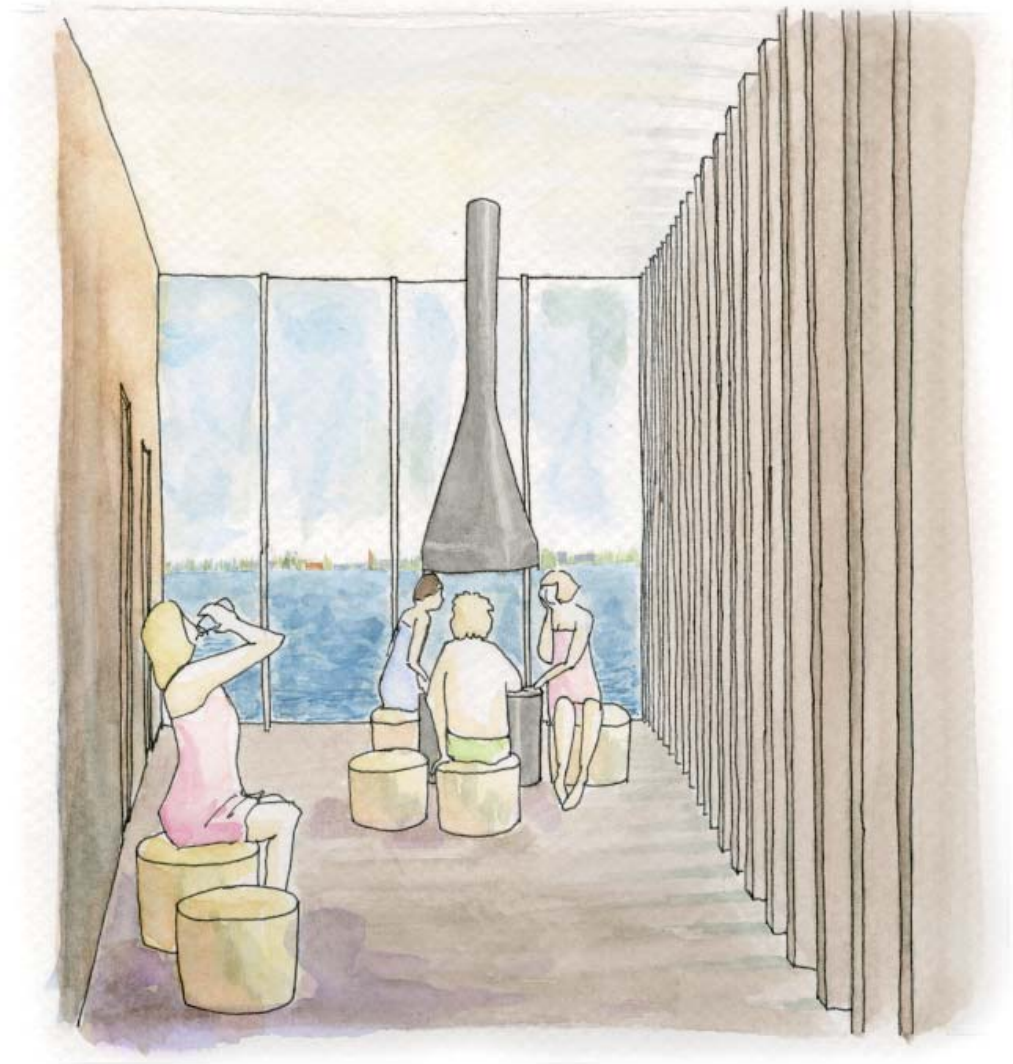
Washing; purifying, preparation, and closure of the ritual.
 Rapids; magnificent and elemental object to get over in the Kalevala narratives.
 Water awakens your body to get ready for the following perceptual experience.

Figure 4.102. Washing space.



The nature comes close enough for tactile communication.
 View changes gradually along the rock hill.

Figure 4.103. The way to salon, sauna and terrace.



Salon. Place where people gather.
Scenery shows the city where you used to be in, now in far away.

Figure 4.104. Salon.



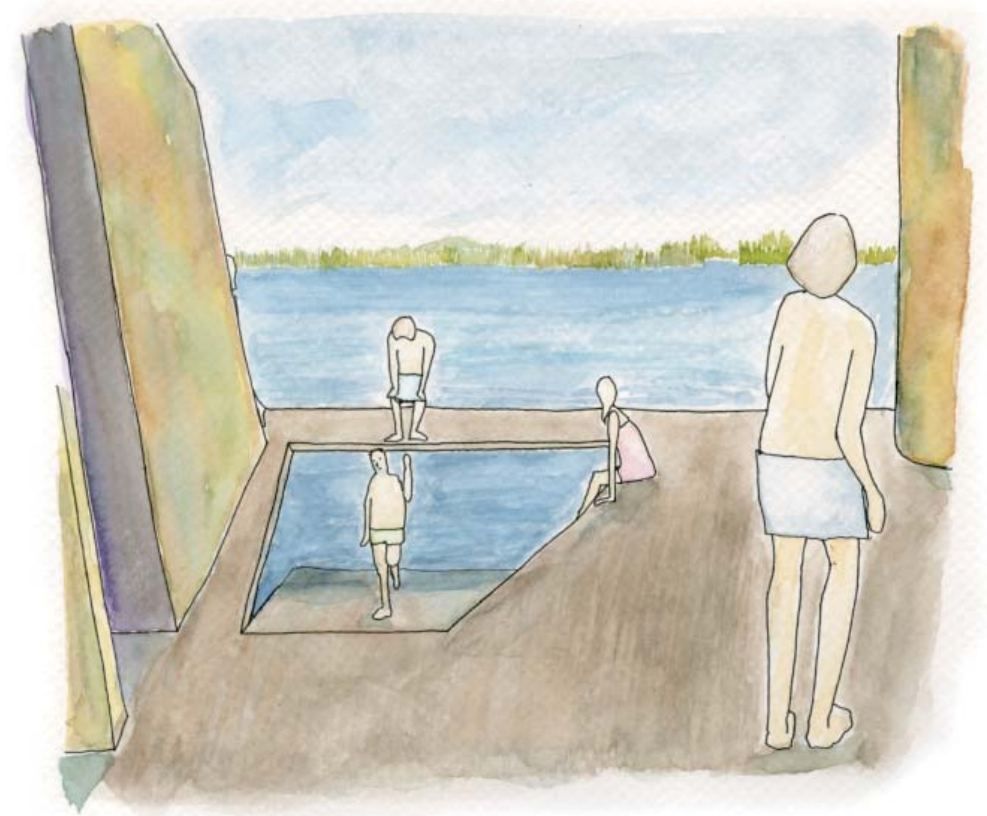
The way to the conceptual experience, waiting you in the sauna.

Figure 4.105. Entrance way to sauna of humanity.



Time to make a decision, where to put yourself.
 Your destiny is in yourself.
 Your existence is a phenomenon, affects the others' fates, so the others' do.
 Distances from stoves, water well, human, or the wall tilted in different angles,
 all the spatial elements lead your decision, physically and mentally.

Figure 4.106. Sauna of humanity.



The direct way to the lake, the way to cool yourself.
 Celebrate the genuine pure nature of Finland, dipping full of your body, being a part of it.

Figure 4.107. Terrace and a slope to the lake.



To the next conceptual experience behind a low door.

Figure 4.108. Entrance door of smoke sauna.



Climb up benches, layered toward the Polar Star,
as the ancient Finns believed the firmament pillar supports the heaven,
as the Kalevala characters climb up the giant trees to reach to the sky.
Water runs the way of light to the stove from the firmament,
connecting the different worlds on the different layers.

Figure 4.109. Smoke sauna benches.



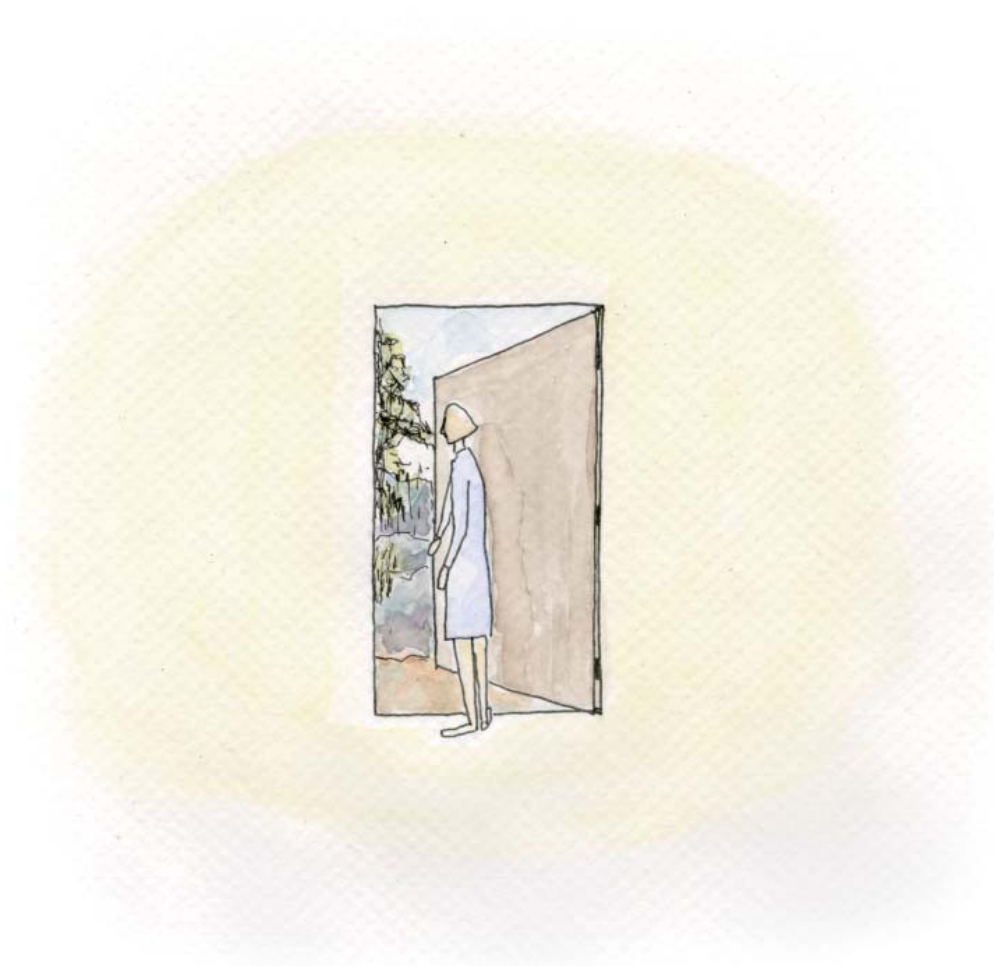
Steps lead you to the lake under the building, to the invisible side.
 Water divides this place and that place, divides your body into two.
 Entering the water way is to start the process to reach to the world of Tuonela.

Figure 4.110. The way to the lake from smoke sauna.



Tuonela, the underworld, behind the Tuonela river, divided from this world.
 The world where the dead live as they used to do, and where life exists as it is in this world.
 After crossing the water, you again see the view of the world,
 possibly the same where you used to be, or possibly not.

Figure 4.111. Outdoor terrace behind smoke sauna.



After all the sauna experience is finished,
empty your mind before coming back to the ordinal life.
This is the end of the mythology, and the world of daily life starts again behind the door.
Now how you experience the world with empirical memory of the Kalevala spirits?



Figure 4.113. A view from a pier.



Conclusion

Human body is a fundamental core of perception. Our primitive sense builds up the perceptual horizon around us. Since we live as human, we experience things only how human beings do, but not in any other way. Therefore, seeking fundamental human criterion in the infinite nature is ethically essential in our life. That is the elemental task of architecture.

Designing architecture is thoroughly accompanied by expression in any extent. Spatial expression in quest of perceptual meaning is highly sensitive and has no clear answer since human perception varies personally. What one sees is always differs from what the others see. Namely, human lives in individual perceptual world for each, never being same as other's. Therefore expressive role of architecture is rather to provide stimuli to our primitive sense than to create vivid consequence of empirical impression, even if it results in different personal experience. Throughout the design process of Kalevala Sauna, this issue experimentally studied, concluding the philosophical idea in three fundamental keys: transition of sensory experience, perceptual phenomenon, and human roles in architecture.

Transition of sensory experience is one of the vital task to be considered carefully in mythological expression. The shift from aural and oral tradition to visual witting of the epic Kalevala eventually caused the loss of genuine meaning of folk epic in the powerful ocular ascendancy. In the design process, the quest of recovering its authenticity had to be executed. It is as if we receive the memory of old perception from the ancient and pass it over to the following generations in our way of present sense.

In a phenomenological aspect, conception of sauna supports the idea to achieve the literal expression in space. Sauna is primitively the perceptual place where phenomena of natural power awaken human bodily sense. The two contrastive subjects, the literal work and sensory space, tightly connect the expression and experience. In addition, interaction between people is essential. Human movements as spatial phenomena build the momentary space, leading the empirical memory of the mythological world, simultaneously, people perceive human.

One of peculiar functions of architecture is to take human into its expression, differing from other art, limited only in few perceptions. Spacial elements stimulates all kinds of bodily senses in any level, therefore people experience the

expression from various perspectives. In the Kalevala Sauna, people receive the mythic notions with embodied form, at the same time, they intervene in architecture to constitute a phenomenological factor to create expressive space. People mutually feel the existence of each other as a narrative part of mythology while they themselves experience it. Resembling to the relation between audiences and performers on a stage, the contrastive roles give them opportunities to participate in spatial expression both subjectively and objectively.

Architecture receives human action. In many cases, its spacial expression is comparatively for holding temporal scenes appearing in it. It is conceivable that architecture builds spacial receptacles for human life unless space itself has a vivid purpose to be an artistic piece of strong expression. Likewise, the mythological metaphors of the Kalevala Sauna possibly recognised only as a background of sauna or something different to whom does not know the mythology. However, nevertheless, the experience remains in their memory of space unconsciously yet tightly. The empirical memory eventually forms a centre of the valance of personal sensory gravity. This phenomenon is what only architecture achieves, intervening human in it. Architectural expression is thus a thing to deepen the perceptual world of human.



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